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ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR

1947,

BY

CHARLES L. ELDER,
M.B., CH.B., D.P.H.

COUNTY BOROUGH OF MIDDLESBROUGH.



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MEMBERS OF THE HEALTH COMMITTEE, 1947-1948.

Chairman :—Councillor J. W. WELCH, J.P.

HIS WORSHIP THE MAYOR (COUNCILLOR F. C. PETTE, J.P.).

COMMITTEE—

Alderman L. G. ALLEN.	Councillor MRS. E. DEVENPORT.
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Alderman A. COOPER.	Councillor W. ECKERT.
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Alderman A. MARSHALL.	M.S.F., M.S.S.Ch.
Alderman T. MEEHAN, O.B.E., J.P.	Councillor EDWARD HARFORD.
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Alderman W. TURFORD, J.P.	Councillor J. LOUGHRAN.
(Resigned May 1948).	Councillor M. C. NEWTON.
Alderman E. TURNER.	(Resigned May, 1948).
Councillor J. A. BROWN, J.P.	Councillor W. RANDALL.
Councillor Mrs. L. BURTON.	Councillor L. TAYLOR.
	Councillor Mrs. M. SAGAR.

Co-OPTED MEMBERS :—

Miss H. KIRKBRIDE.	Dr. J. E. HOWELL.
Dr. B. F. LONGBOTHAM.	Mr. C. W. L. HEATON.

MEMBERS OF THE SANITARY AND BATHS COMMITTEE, 1947-1948.

Chairman :—Alderman A. H. COCKS.

HIS WORSHIP THE MAYOR (COUNCILLOR F. C. PETTE, J.P.).

COMMITTEE :—

Alderman L. G. ALLAN.	Councillor MRS. E. DEVENPORT.
Alderman A. MARSHALL.	Councillor W. GROSVENOR,
Alderman W. TURFORD, J.P.	M.S.F., M.S.S.Ch.
(Resigned May, 1948).	Councillor EDWARD HARFORD.
	Councillor ERNEST HARFORD.
Alderman E. TURNER.	Councillor M. C. NEWTON,
Alderman J. S. BOLTON.	(Resigned, May, 1948).

MEMBERS OF THE HOSPITALS COMMITTEE, 1947-1948.

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HIS WORSHIP THE MAYOR (COUNCILLOR F. C. PETTE, J.P.).

COMMITTEE :—

Alderman A. COOPER.	Councillor J. GILMORE.
Alderman J. NUGENT.	Councillor F. J. LONGSTAFF.
Councillor S. G. BENNETT.	Councillor W. RANDALL.
Councillor MRS. L. BURTON.	Councillor MRS. M. SAGAR.
Councillor W. ECKERT.	Councillor L. TAYLOR.

MEMBERS OF THE MATERNITY AND CHILD WELFARE COMMITTEE, 1947-1948.

Chairman :—Councillor MRS. L. BURTON.

HIS WORSHIP THE MAYOR (COUNCILLOR F. C. PETTE, J.P.).

COMMITTEE :—

Alderman A. COOPER.	Councillor MRS. M. SAGAR.
Alderman J. NUGENT.	Councillor J. SLATER.
Councillor MRS. E. DEVENPORT.	Councillor L. TAYLOR.
Councillor T. GENT.	Councillor J. W. WELCH, J.P.
Councillor R. R. KITCHING.	

CO-OPTED MEMBERS :—

Mrs. E. GAUNT.	Mrs. M. E. HEWITSON.	Dr. W. B. LEVIE.
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STAFF OF THE PUBLIC HEALTH DEPARTMENT, 1947.

Medical Officer of Health and Chief Medical Adviser :—

T. LLOYD HUGHES, M.D., Ch.B., D.P.H., Barrister-at-Law. (To 31.10.47).

CHARLES L. ELDER, M.B., Ch.B., D.P.H. (From 1.12.47).

Deputy Medical Officer of Health :—

CHARLES L. ELDER, M.B., Ch.B., D.P.H. (To 28.2.47).

A. MENZIES, M.B., Ch.B., D.P.H. (From 1.3.47).

Clinical Tuberculosis Officer :—

M. WALTON, M.B., B.S., D.P.H.

Assistant Clinical Tuberculosis Officer and Director of Mass Miniature Radiography Unit :—

A. M. FORREST, M.B., Ch.B., D.P.H. (From 1.10.47).

Senior Assistant Medical Officer of Health for Maternity and Child Welfare :—

BETHIA M. NEWLANDS, M.B., Ch.B., D.P.H.

Assistant Medical Officer of Health for Maternity and Child Welfare :—

JOAN B. CROOK, M.B., Ch.B. (From 8.1.47 to 12.10.47).

ELIZABETH WEBSTER, M.B., Ch.B., D.P.H., (From 1.9.47).

Clinical Venereal Diseases Officer :—

A. A. WILLIAMS, M.B., B.S., M.R.C.S., M.R.C.P.

MATERNITY HOSPITAL.

Medical Superintendent (Administrative) :—

T. LLOYD HUGHES, M.D., Ch.B., D.P.H., Barrister-at-Law. (To 31.10.47).

CHARLES L. ELDER, M.B., Ch.B., D.P.H. (From 1.12.47).

Consulting Obstetrician :—

G. F. LONGBOTHAM, M.B., C.M. (To 12.3.47).

BRYAN WILLIAMS, M.D., F.R.C.S., F.R.C.O.G. (From 13.3.47).

Resident Medical Officer :—

M. O. WILL, M.B., Ch.B.

Matron :—

H. KIRKBRIDE, S.R.N., S.C.M.

Senior Clerk :—

MRS. F. HAWKEN.

MIDDLESBROUGH GENERAL HOSPITAL.

Medical Superintendent :—

T. LLOYD HUGHES, M.D., Ch.B., D.P.H., Barrister-at-Law. (To 27.7.47).

E. W. GRAHAME, M.D., Ch.M., F.R.C.S. (Edin.), F.R.C.S. (Eng.) (From 28.7.47).

Medical Superintendent and Senior Surgeon :—

E. W. GRAHAME, M.D., Ch.M., F.R.C.S. (Edin.), F.R.C.S. (Eng.) (From 28.7.47).

Senior Surgeon :—

W. BRITAIN JONES, M.B., B.S., M.R.C.S. (To 27.7.47).

Deputy Medical Superintendent and Physician :—

A. ALUN WILLIAMS, M.B., B.S., M.R.C.S., M.R.C.P.

Resident Medical Officers :—

J. J. KINSELLA, M.B., Ch.B., L.M. (To 7.2.47).

H. CAMRASS, L.R.C.P., L.R.C.S., L.R.F.P. and S. (To 6.7.47).

F. G. ORTON, M.B., B.S. (From 20.1.47. To 31.7.47).

D. REEFSOHN, M.B., B.S. (From 31.7.47).

Consulting Ophthalmic Surgeon :—

*A.E.P. PARKER, F.R.C.S.

Consulting Ear, Nose and Throat Surgeon :—

*J. B. T. KESWICK, M.B., Ch.B.

Consulting Radiologist and Electro-Therapeutist :—

*WILLIAM IRWIN, M.B., B.Ch., D.M.R.E.

Consulting Orthopaedic Surgeon :—

*J. B. REID, F.R.C.S., M.Ch., ORTH.

Consulting Gynaecologist :—

BRYAN WILLIAMS, M.D., F.R.C.S., F.R.C.O.G. (From 25.3.47).

Consulting Tuberculosis Officer :—

M. WALTON, M.B., B.S., D.P.H.

Visiting Anaesthetist :—

C. W. FLEISCHMANN, M.B., Ch.B., D.A. (From 25.6.47).

Visiting Psychiatrist :—

T. M. CUTHBERT, M.R.C.S., L.R.C.P., D.P.M.

Visiting Dental Surgeon :—

L. T. DAVIDSON HEPPELL, L.D.S.

Matron :—

MRS. E. ARMETT, S.R.N., S.C.M.

Pharmacist :—

G. T. KNIGHT, PhC., M.P.S.

Venereal Diseases Almoner :—

MISS E. A. HODGSON.

Senior Clerk :—

MRS. E. LOUKS, F.C.C.S.

HEMLINGTON EMERGENCY HOSPITAL.**Medical Superintendent :—**

T. LLOYD HUGHES, M.D., Ch.B., D.P.H., Barrister-at-Law. (To 31.10.47).
CHARLES L. ELDER, M.B., Ch.B., D.P.H. (From 1.12.47).

Deputy Medical Superintendent :—

M. D. LEITCH, M.B., Ch.B. (To 31.5.47).
P. W. GRIFFIN, L.R.C.P. and s., I. (From 7.7.47).

Resident Medical Officers :—

URSULA BARRY, M.B., Ch.B. (To 31.7.47).
M. E. GUEST, M.B., Ch.B. (To 19.7.47).
EILEEN STEEL, M.B., Ch.B. (To 31.7.47).
J. A. SMITH, M.B., Ch.B. (From 1.8.47).
F. G. ORTON, M.B., B.S. (From 1.8.47).
N. H. WASS, M.B., B.A.O. (From 1.10.47).
C. BOYLE, M.B. (To 17.12.47).

Visiting Surgeons :—

*D. C. DICKSON, F.R.C.S.
*C. C. MCCALLUM, F.R.C.S.

Orthopaedic Surgeon :—

*J. B. REID, F.R.C.S., M.Ch., Orth.

Physician :—

*J. INKSTER, M.D., F.R.C.P.

Ear, Nose and Throat Surgeon :—

*J. B. T. KESWICK, M.B., Ch.B.

Ophthalmic Surgeon :—

*A. E. P. PARKER, F.R.C.S.

Psychiatrist :—

*M. A. ARCHDALE, M.B., B.S., D.P.H.

Radiologist and Electro-Therapeutist :—

*W. IRWIN, M.B., Ch.B., D.M.R.E.

Anaesthetist :—

*D. N. POWER, M.D.

Dental Surgeon :—

*L. T. DAVIDSON HEPPELL, L.D.S.

Matron :—

MISS D. GARDNER, S.R.N., S.C.M.

Pharmacist :—

G. W. WATCHORN, M.P.S.

Senior Clerk :—

MISS A. WELFORD.

WEST LANE HOSPITAL.**Medical Superintendent :—**

T. LLOYD HUGHES, M.D., Ch.B., D.P.H., Barrister-at-Law. (To 31.10.47).
CHARLES L. ELDER, M.B., Ch.B., D.P.H. (From 1.12.47).

Deputy Medical Superintendent :—

CHARLES L. ELDER, M.B., Ch.B., D.P.H. (To 28.2.47).
A. MENZIES, M.B., Ch.B., D.P.H. (From 1.3.47).

Tuberculosis Physician :—

M. WALTON, M.B., B.S., D.P.H.

Resident Medical Officer :—

K. I. BRUCE, M.B., Ch.B.

Matron :—

MRS. B. GARDNER.

Senior Clerk :—

MRS. B. WALLACE.

District Medical Officers and Public Vaccinators :—

E. H. MOSELEY, M.B., B.S.
C. S. O'HAGAN, M.B., B.S.

Chief Sanitary Inspector :—

HENRY WHITFIELD, Mem.R.S.I., Mem.S.I.A.

Deputy Chief Sanitary Inspector :—

T. E. PETERSON, Mem.R.S.I., Mem.S.I.A.

District Inspectors :—

†S. E. ELLIS. (To Oct. 1947). F. HOLLOWAY. (From May, 1947).

†F. R. ALLAN. †S. WALKER. (To Feb. 1947).

†D. B. COULL. (To May, 1947). †L. HIMSWORTH.

†K. W. WILLANS.

Shops Inspector :—

R. G. THOMPSON.

Chief Clerk (Sanitary Department).

P. E. TAGGART.

Veterinary Surgeon :—

*W. G. HAGGIE, M.R.C.V.S.

Borough Analysts :—

*E. W. JACKSON, F.I.C.

*A. SCHOLES, F.I.C.

Health Visitors :—

M. R. WHITE, S.R.N., R.S.C.N., S.C.M., H.V. CERT—(Superintendent),

E. ARMSTRONG, S.R.N., S.C.M., H.V. Cert.

*A. BLACKETT, S.R.N., S.C.M., H.V. Cert. (To 30.4.47).

M. BUCHANAN, S.R.N., S.C.M., H.V. Cert.

I. P. BURT, S.R.N., R.F.N., S.C.M., H.V. Cert. (From 16.9.47).

N. COURTNEY, S.R.N., S.C.M., H.V. Cert.

E. GRAY, S.R.N., S.C.M., H.V. Cert. (To 31.5.47).

V. GRAY, S.R.N., S.C.M., H.V. Cert. (From 1.11.47).

K. M. IMESON, R.S.C.N., S.C.M., H.V. Cert.

M. MARKS, S.R.N., S.C.M., H.V. Cert. (To 1.11.47).

I. MATHISON, S.R.N., S.C.M., H.V. Cert. (To 31.8.47).

I. PALING, S.L.N., S.C.M., T.A. Cert., H.V. Cert.

Health Department Nurses :—

E. HOWARD, S.R.N.

G. LAFFERTY, S.R.N., S.C.M.

E. WILSON, S.R.N., S.C.M.

Tuberculosis Nurses :—

D. E. HALL, S.R.N.

A. S. HAYWOOD, S.R.N., H.V. Cert.

D. COLTHORPE, S.R.N.

Tuberculosis Almoner :—

FREDA L. MCCARTHY.

Welfare Centre Attendants.

MRS. J. M. CRAGGS. (From 6.1.47).

MRS. J. KANE. (From 31.5.47).

Infant Life Protection Visitor :—

A. G. COWLEY. (To March, 1947).

Municipal Midwives :—

M. ROBINSON, S.R.N., S.C.M. (Supervisor).	L. JACKSON, S.C.M.
M. ABBOTT, S.C.M.	E. JONES, S.R.N., S.C.M. (From 1.5.47).
F. BARKER, S.C.M.	D. LEWIS, S.R.N., R.F.N., S.C.M.
M. BELL, S.C.M.	V. LEWIS, S.R.N., S.C.M.
M. BROWN, S.C.M.	E. MCINTOSH, S.C.M.
I. CHAMBERS, S.R.N., R.F.N., S.C.M.	C. MCKINLAY, S.C.M.
H. CLARK, S.R.N., S.C.M.	B. A. O'CONNELL, S.R.N., S.C.M.
M. FAIRBAIRN, S.C.M.	A. OLDHAM, S.C.M.
A. GIBSON, S.C.M.	E. PEART, S.C.M.
M. K. HALFPENNY, S.R.N., S.C.M. (To 31.10.47).	S. J. SCRIMGOUR, S.C.M.
M. L. HARRISON, S.R.N., S.C.M. (To 28.2.47).	D. SPENCER, S.R.N., S.C.M.
M. HATTON, S.C.M. (From 1.8.47).	C. STEPHENSON, S.R.N., S.C.M. (From 7.2.47).
E. HEWARD, S.R.N., S.C.M. (From 24.10.47).	K. M. TIERNAN, S.R.N., S.C.M.
	A. A. TOWNSEND, S.C.M.
	S. WETHERALL, S.C.M. (To 31.1.47).

Ambulance Officer :—

ARTHUR G. POOLEY, M.M.

Vaccination Officer :—

J. J. WALSH.

Chief Clerk :—

JOHN W. RAWDON, C.R.S.I.

Senior Clerks :—

W. H. DICKINSON.

S. SMALES.

J. H. CARGILL.

Shorthand Typists and Clerks :—

MISS M. ROBSON.	MRS. E. TURNER.
MISS G. HUDSON.	MISS I. ANDREWS.
MISS S. HOLLAND.	MISS P. BELL.
MISS M. TIMNEY.	MISS T. BROWN.
MISS J. C. WOOLARD.	MRS. J. COOPER.
MISS M. M. O'ROURKE.	MRS. O. GROSVENOR.
W. D. SURTEES.	MISS M. HONEYWELL.
MISS E. VALLANCE.	MRS. E. C. MORPHETT.
	MISS E. WARIN.

*—Part-time.

†—Meat Certificate of R.S.I.

‡—Meat Certificate (Scotland).

ANNUAL REPORT
of the
MEDICAL OFFICER OF HEALTH.

HEALTH DEPARTMENT,
MUNICIPAL BUILDINGS,
MIDDLESBROUGH,
JULY, 1948.

To the Chairman and Members of the Health Committee.

Mr. Chairman, Ladies and Gentlemen,

I have the honour to present to you the Annual Report on the work of the Public Health Department for the year 1947. The Report constitutes work which was done on behalf of the then existing Health, Hospitals and Maternity and Child Welfare Committees, and comes to you as the newly created Health Committee under the National Health Service Act, 1946.

The Committee will appreciate that for the major part of the year the Department was under the direction of the then Medical Officer of Health, Dr. T. Lloyd Hughes, who resigned on the 31st October, 1947, to take up his appointment as Senior Administrative Medical Officer to the Liverpool Regional Hospital Board. I am sure the Committee will join with me in wishing him every success in his new appointment and will express their appreciation of the service he rendered to the various Committees.

Vital statistics are presented and analysed in some detail and comparison made with other areas and previous years.

The birth rate for 1947 was 25.85 per 1,000 population as compared with 24.67 in 1946, and 20.92 in 1945. This represents a substantial increase and a much higher figure than that for England and Wales which is 20.5 nett and for the 126 County Boroughs and great towns which is 23.30 per 1,000 population. This continued increase has resulted in increased strain on the staff at the Maternity Hospital, the Domiciliary Midwifery Service and the Health Visitors. The work at the Maternity Hospital has been particularly onerous due to the lack of accommodation and the Midwives and Health Visitors have suffered because of depleted staffs during the year. Great praise is due to all these Services for the excellent work rendered by all under difficult conditions.

The death rate of 12.77 per 1,000 population showed a slight increase over 1946 when the figure was 12.35. The steady fall experienced since 1940 has, therefore, been arrested.

The maternal mortality rate of 0.55 per 1,000 births is the lowest ever recorded and shows a pleasing reduction from 1.47 per 1,000 births in 1946, and 2.22 per 1,000 births in 1945. It is justifiable to attribute this in no small measure to the improved obstetric facilities recently provided.

The infantile mortality rate of 64 per 1,000 live births, shows an increase on the figure of 56 per 1,000 live births in 1946, but is still the second lowest figure ever recorded in Middlesbrough. The increase over 1946 has been largely attributed to deaths from Infantile Gastro-Enteritis occurring in the first year of life, an outbreak of which affected the town during the year and which was evident to some extent throughout the country. Many of these deaths occurred in the poorer areas of the town and were probably contributed to by the hot, dry summer, the prevalence of flies and the general lacking in hygiene in these areas of the town. Apart from these deaths other causes remained at approximately the same figure as for 1946 and once more reflects great credit on the Maternity and Child Welfare and Hospital Services. Nevertheless one must remember that this figure is 50% higher than the comparable figure for England and Wales and much work remains to be done in industrial areas such as this to reduce the infantile mortality rate, which has not yet reached the lowest to which it can be reduced.

The illegitimate births have decreased from 282 in 1946 to 227 in 1947. It is hoped that the figure for 1946, which was the maximum reached since the onset of the war, will prove to have been the peak figure and that soon we may see a continued reduction. A pre-war figure was 125.

1,204 new cases were treated at the Venereal Diseases Clinic during the year as compared with 1,444 in 1946. Here again, as in the illegitimate births, a reduction has been seen for the first time since the onset of the war and it is hoped that we may be seeing a decreased incidence of this disease. Improved facilities for treatment, extra effort in bringing contacts and others for treatment will probably tend to bring a bigger percentage of actual cases to the Clinic and it may well be that there is a greater diminution in incidence than is represented by these figures.

An increased number of infectious diseases was notified, 5,020 cases being the figure for 1947 as against 3,697 in 1946. The outbreak of Measles experienced during the last three months of 1946 was continued well into 1947 and partly accounts for this increase, the remainder resulting from increased incidence of Scarlet Fever which was of a mild nature and Whooping

Cough. It is pleasing once more to report a fall in the number of cases of Diphtheria, 41 only being notified during the year, resulting in 1 death. The number of notified cases is again a new low record and is undoubtedly due in large measure to the efforts of the Department in fostering immunisation against Diphtheria. Although the number of school children immunised has reached the satisfactory figure of 75% the number of pre-school children immunised does not yet exceed 50% and a further appeal must be made to parents to realise that the seriousness of this disease can be almost completely prevented by taking advantage of the facilities offered for immunisation. It is desirable that this should be done as far as possible before children go to school and indeed before they start mixing with masses of children.

New notifications for Tuberculosis numbered 285 for the year as compared with 245 in 1946 and 238 in 1945. The Tuberculosis death rate was 0.93 per 1,000 population against 0.98 per 1,000 population in 1946. These figures compare unfavourably with the figure for England and Wales which was 0.54 per 1,000 population. Improved diagnostic facilities, increased opportunity for X-Ray examinations and increase in the staff of the Tuberculosis Department may have accounted for the increased number of new notifications, but it is regrettable in this area that many cases are still found too late and many patients are reluctant to accept the facilities offered for treatment in the early stages. The inception of Mass Miniature Radiography will probably initially increase the number of new notifications due to early detection of the disease and it is hoped that there will be sufficient provision of beds so that patients can receive adequate treatment in the early stages of this disease. The segregation of the known positive cases, especially among children, would do much to diminish the incidence of this disease, but it is not always possible to accommodate all such cases and many of the cases are reluctant to enter Sanatoria when they feel that they can no longer be cured. The menace of Tuberculosis will never be overcome until it is appreciated by all sections of the community that this is an infectious disease and until it is treated as such, although much good can be done by the teaching of general hygiene measures to known positive cases who remain at home: nevertheless, it means that in many parts of the town whole families are exposed to concentrated doses of this infection under very poor living conditions.

The general Health Services have continued to function satisfactorily during the year. Many developments which have not been possible due to the difficulties of the times have been incorporated in the proposals submitted under the National Health Service Act.

Although under the National Health Service Act the Hospitals which the Middlesbrough Corporation have administered will be passing to the National Service, services in the Hospitals have been developed wherever possible. Indeed, realising that the transition will be inevitably a difficult one many developments have been speeded up so as to ensure that the Hospital Services will be as efficient as possible before the appointed day.

At the General Hospital, with the retirement of the Senior Surgeon, the Medical Officer of Health relinquished his duties as Administrative Medical Superintendent and Mr. E. W. Grahame was appointed Medical Superintendent and Surgeon and commenced duties on the 28th July, 1947.

In addition to Mr. Grahame, I would welcome to the town's service, Mr. Bryan Williams, who took up duty as Consulting Obstetrician and Gynaecologist. With his arrival in March, 1947, it was possible to set up a Gynaecological Department and a Sterility Clinic at the General Hospital.

Dr. Walton, the Clinical Tuberculosis Officer, with the ready co-operation of the Radiologist, Dr. Irwin, inaugurated a Chest Clinic during the year, which is referred to later in the body of the Report.

The Area Pathological Laboratory, which was inaugurated in 1946, expanded greatly during the year and I am indebted to Dr. Stanley Wray for his report on this Service.

Out-Patient facilities were also afforded Dr. T. M. Cuthbert and Dr. G. McCoull to deal with Psychiatric and Mental Deficiency cases respectively.

Conferences with the Consulting Adviser to the Ministry of Health led to the inception of a Mass Miniature Radiography Unit for Tees-side to be established at the General Hospital and towards the end of the year the first staff appointments to this Unit were made. Courses of training were commenced and the Unit is expected to be ready for use early in 1948.

Preliminary discussions also took place with the Director of the Medical Research Council Laboratory Service towards the establishment in Middlesbrough of a Public Health Laboratory and it is hoped that this Laboratory will be set up at an early date and be established in conjunction with the Area Pathological Laboratory by agreement with the Regional Hospital Board.

It had been hoped to set up Radio-Therapeutic facilities for the treatment of Cancer at the Middlesbrough General Hospital and although discussions had reached a far advanced state, it was eventually decided that this matter should be left to the Regional Hospital Board.

I have already referred to the appointment of Mr. Bryan Williams as Obstetrician. Soon after his arrival and in conjunction with the Ambulance Service it was possible to establish an Obstetrical Flying Squad which was made available to the people of Middlesbrough for serious obstetric emergencies. Improved facilities for the nursing staff of the Maternity Hospital were made with the opening of the Eastcote Nurses Home.

At Hemlington Hospital, preliminary steps were taken to reduce the bed state from its war-time figure to modern civilian standards. The ultimate reduction in the bed state of this hospital will probably be from 480 to 200. The hospital continued to be a Training School for Assistant Nurses. With the decreased use of the hospital for military personnel it was possible to make greater use of it for civilian cases and arrangements were made for long stay Local Authority cases to be placed here and in addition facilities were offered to other hospitals in the area to relieve their overcrowded waiting lists.

Little change has taken place in the other Health Services of the town, but brief mention might be made of the inauguration of Training Courses for Student Health Visitors, which is done in collaboration with other Authorities. It is hoped by this means to implement the Health Visiting Staff which has been carrying a heavy burden owing to its lack of numbers.

As will be seen from pages 4 to 10 staff changes took place during the year. Whilst I have made reference to certain new senior appointments, I should like to refer to the retirement of Mr. W. Britain Jones from his position as Senior Surgeon at the General Hospital and also to the retirement of Dr. George F. Longbotham from his position of Consulting Obstetrician to the Maternity Hospital: both these gentlemen had rendered 30 years service. Their valuable services and unfailing loyalty to their respective Hospitals and to the Public Health Department generally will be greatly missed and every good wish is extended to them in their retirement. It is pleasing to record that they are both able to continue with other duties. I should like to pay my tribute to all members of the staff, medical, nursing and clerical for their loyal and whole-hearted co-operation. The efforts made by them, however, spectacular or otherwise, have contributed in no uncertain measure to the health and happiness of most of the citizens of Middlesbrough.

I also acknowledge most gratefully the interest and support of the Chairman and Members of the Health Committee and of the Chairman and Members of the other Committees of the Council concerned with the work of the Health Department. I would also pay tribute to the ready help and co-operation given at all times by all the chief officials of the Corporation and their staffs.

I am, Mr. Chairman, Ladies and Gentlemen,
Your obedient Servant,

Charles L. Elder

Medical Officer of Health.

SECTION A.

STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

Area (in acres) including 173 acres of tidal water	..	7,304
Estimated Civilian Population (Mid-1947)	.. ..	140,460
Number of Inhabited Houses (end of 1947)	.. ..	37,034
Rateable Value	.. .. .	£768,041
Product of a penny rate	.. .. .	£2,940

Number of Live Births :—

	Male	Female	Total
Legitimate & Illegitimate	1,888	1,743	3,631
Illegitimate	132	95	227

Number of Still Births—

Legitimate & Illegitimate	61	50	111
Illegitimate	3	6	9

Deaths : Registered	1,089	835	1,924
Nett	1,022	771	1,793

Deaths from :—

Typhoid and Paratyphoid Fevers	.. ..	—
Measles	.. ..	6
Scarlet Fever	.. ..	—
Whooping Cough	.. ..	1
Diphtheria	.. ..	1
Influenza	.. ..	18
Violence	.. ..	51
Diarrhoea (under 2 years)	.. ..	52
Cancer	.. ..	270

Deaths (under 1 year) :—	Male	Female	Total
Legitimate	130	89	219
Illegitimate	4	9	13
Total	134	98	232

Birth Rates and Death Rates, 1947.

	Middlesbrough	England & Wales	126 County Boroughs & Great Towns
Rate per 1,000 Population :—			
Live Births	25.85	20.5	23.3
Still-births	0.79	0.50	0.62

Annual Death Rate

per 1,000 Population :—

All causes	12.77	12.0	13.0
Typhoid and Paratyphoid Fevers	0.00	0.00	0.00
Smallpox	0.00	0.00	0.00
Measles	0.01	0.01	0.02
Scarlet Fever	0.00	0.00	0.00
Diphtheria	0.00	0.01	0.01
Influenza	0.13	0.09	0.09
Whooping Cough ..	0.00	0.02	0.03

Rate per 1,000 Live Births :—

Diarrhoea and Enteritis (under 2 years) ..	14.32	5.8	8.0
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Maternal Mortality Rate per

1,000 Total Births :—

Puerperal Sepsis and post abort. ..		0.16	
Other puerperal causes ..	.55	1.01	
All puerperal causes ..	.55	1.17	

Death Rate of Infants under one year of age :—

All infants per 1,000 live births ..	64	41*	47
Legitimate infants per 1,000 legitimate live births	64		
Illegitimate infants per 1,000 illegitimate live births ..	57		

Comparative Rates :

Birth Rate (live births)	25.85	20.5	23.3
Death Rate	12.77	12.0	13.0
Infant Mortality Rate	64	41	47
Maternal Mortality Rate	.55	1.17	

Notifications.—Rates per 1,000 Civilian Population.

	Middlesbrough	England and Wales	126 County Boroughs and Great Towns including London
Typhoid Fever ..	..	0.01	0.01
Paratyphoid Fever ..	..	0.01	0.01
Cerebro Spinal Fever	0.16	0.05	0.06
Scarlet Fever.. ..	3.71	1.37	1.54
Whooping Cough ..	2.32	2.22	2.41
Diphtheria	0.29	0.13	0.15
Erysipelas	0.23	0.19	0.21
Smallpox .. ..	..	0.00	0.00
Measles	19.61	9.41	9.13
Pneumonia	11.82	0.79	0.89
Rates per 1,000 Total Births (Live & Still).			
Puerperal Fever .. } Puerperal Pyrexia.. }	16.30	7.16	8.99

WARD STATISTICS.

Ward	No. of cases of Infectious Disease per 1,000 population	Death Rate	Birth Rate	Infant Mortality Rate
Ayresome ..	31.16	11.28	24.55	60
Acklam	28.04	12.47	19.19	55
Cannon	45.76	13.57	32.64	79
Cleveland ..	45.70	12.25	29.70	79
Exchange ..	37.47	14.08	27.12	60
Grove Hill ..	31.26	11.58	21.49	33
Linthorpe ..	25.61	10.84	16.85	37
Newport	43.56	14.30	33.85	84
Ormesby	41.30	12.28	29.32	56
St. Hilda's ..	42.53	17.48	30.88	69
Vulcan	41.53	13.95	26.35	97

ANALYSIS OF VITAL STATISTICS.

- (1) The estimated population for 1947 is 140,460, which is an increase of 2,730 on that for the year 1946.
- (2) Live births increased during the year to a figure of 3,631 as compared with 3,398 for 1946. The birth rate is, therefore, 25.85 per 1,000 population as compared with 24.67 for 1946, and is considerably higher than the figure for England and Wales and also for that in respect of the 126 County Boroughs and great towns.
- (3) The death rate has increased slightly for 1947, the rate being 12.77 per 1,000 population as compared with 12.35 for 1946. There were 92 more deaths in 1947 than in 1946.
- (4) The maternal mortality rate is 0.55 per 1,000 births as compared with 1.47 in 1946.
- (5) The number of deaths from Cancer is 270 as compared with 232 for 1946.
- (6) The infantile mortality rate of 64 per 1,000 live births shows an increase upon the figure for 1946 which was 56 per 1,000. This compares unfavourably with the figure for England and Wales which is 41 per 1,000 and with the figure for the 126 County Boroughs and great towns which is 47 per 1,000. There were 232 deaths in 1947, in infants under the age of one year as compared with 216 in 1946. 117 of these deaths were in the neo-natal period or first four weeks of life.

Prematurity again accounted for a large percentage of these neo-natal deaths, there being 52 cases in this category. It is hoped that in the near future it will be possible to establish a Paediatric Department in Middlesbrough which, in collaboration with the Obstetricians, might help to reduce this very grave problem. Taking the infantile mortality figures as a whole, apart from prematurity, the main causes of death were :

Gastro-Enteritis	..	..	45
Broncho-Pneumonia	..	..	40

N.B.—Very often these diseases simulate one another in infancy, many of the cases of Gastro Enteritis succumbing terminally in a condition resembling Broncho-Pneumonia.

It seems probable that much of this preventable infant mortality could be avoided when environmental circumstances and housing conditions are improved. The raising of the economic status of the family and improved knowledge of hygiene and a higher standard of infant care and feeding would do much to prevent many of these infant deaths. Extended facilities for Mothercraft teaching, increased Health Visiting staffs and Health Education will all play their part, but it is felt that the greatest single factor will be the early provision of better housing conditions for the people.

MIDDLESBROUGH GENERAL HOSPITAL.

Mr. Ernest W. Grahame, Medical Superintendent and Surgeon, reports :—

There was a great increase in the number of admissions to the Middlesbrough General Hospital during the year 1947 amounting to no less than 20% more than in 1946. Most of the patients were in hospital for periods of less than four weeks showing that the nature of the work was becoming more acute. In order to make room for the acute sick, it was necessary to reduce the number of infirm patients and to start a waiting list for all types of patients when the shortage of hospital beds became apparent.

This figure was made worse by the shortage of nursing staff which reached a very low level in the Autumn of 1947. One ward was closed and others were kept open with difficulty. Towards the end of the year, there was a better intake of Student Nurses and at the end of the year the position was more satisfactory.

The increase in the work of the hospital was shared by all departments, i.e., Out-Patient, X-Ray, Physiotherapy and Theatre. The medical and surgical out-patient clinics were re-organised and the minor cases separated from them. The appointment of Mr. Bryan Williams as Gynaecologist resulted in completely new Out-Patient and In-Patient Departments with very large attendances.

The opening of the new Physiotherapy Department gave greatly improved accommodation to a rapidly expanding department and offered better facilities for both patients and staff. Certain structural improvements are still needed in this department.

The setting up of the Area Pathological Laboratory in the hospital filled a very big gap in the medical services, not only of the hospital, but of the whole area.

The re-grouping of the wards led to increased efficiency in the hospital.

Many serious structural deficiencies still remain in the hospital, but before embarking on any alterations, it would be necessary for the plans of the Regional Hospital Board to be formulated with regard to the various hospitals in Middlesbrough and a decision reached as to what particular use is to be made of existing buildings.

In conclusion, Mr. Grahame pays tribute to the co-operation of the staff at the hospital, especially in the difficult period of the year when there was an acute shortage of nurses.

ADMISSIONS :—

Total number of admissions (including infants born in Hospital)	3,612
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MORTALITY :—

Total number of deaths	330
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DISCHARGES :—

Total number of discharges	3,252
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DURATION OF STAY OF PATIENTS

DISCHARGED OR DIED :—

(1) Under four weeks	2,830
(2) Four weeks and under thirteen weeks	631
(3) Thirteen weeks or more	121

OCCUPIED BEDS :—

(a) Average during the year	209
(b) Highest number, 254 on 25th November, 1947.	
(c) Lowest number, 156 on 1st January, 1947.	

THE TRAINING OF NURSES :—

The Examination results are as follows :—

STATE FINAL EXAMINATION PASSED BY 6 CANDIDATES.

STATE PRELIMINARY EXAMINATION :—

Parts 1 and 2 passed by 3 Candidates.

Part 1 passed by 2 Candidates.

Part 2 passed by 9 Candidates.

DENTAL DEPARTMENT :—

1947.

Number of individuals seen	405
Number of attendances for treatment	640

EAR, NOSE AND THROAT DEPARTMENT :—

Number of cases dealt with during the year	505
Number of attendances	635
Number of operations	428

OPHTHALMIC DEPARTMENT :—

Number of cases seen during the year	204
Number of attendances	295
Operations performed	31

ORTHOPAEDIC DEPARTMENT :—

Patients seen	..	..	..	..	288
Number of attendances	..	..	..	..	743
Number of operations	..	..	..	..	66

GYNAECOLOGICAL DEPARTMENT :—

Patients seen	..	..	..	..	439
Number of attendances	..	..	..	..	772
Number of operations	..	..	..	..	20

STERILITY CLINIC :—

Patients seen	..	..	..	..	54
Number of attendances	..	..	..	..	88

MINOR AILMENTS DEPARTMENT :—

The Minor Ailments Out-patient work is made up of sick inmates sent from Holgate Institution, discharged patients from Hospital Wards and cases sent by District Medical Officers and other medical men of the town.

Number of patients seen	..	..	..	1,324
Number of attendances	..	..	..	6,282

X-RAY AND ELECTRICAL DEPARTMENTS :—

Dr. Irwin, M.B., Ch.B., D.R.M.E., is in charge of these Departments, which are staffed by two specially trained Sisters, one being in charge of X-Ray Department with a staff of four pupil Radiographers and the other in charge of the Physiotherapy Department.

The equipment includes :—

- (1) A Diagnostic X-ray Apparatus.
- (2) Deep Therapy Apparatus for the treatment of Cancer.
- (3) Other electrical equipment, *i.e.*, Kromayer Lamp, Infra Red Ray, Ultra Violet, Radiant Heat, Diathermy. Ionisation and treatment by Faradism and Galvanism.

Number of patients seen	..	..	..	4,378
Number of attendances	..	..	..	9,700

Treatments were given as follows :—

X-RAY DEPARTMENT :—

Films and Screenings	9 542
Treatments	194

DEEP THERAPY DEPARTMENT :—

Treatments	736
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ELECTRO-THERAPEUTIC DEPARTMENT :—

Diathermy Treatments	524
Stimulations	452
Radiant Heat	..	..	..	790
Short Wave Therapy	..	..	..	368
Infra Red Ray Treatments	..	..	..	120
Massage	970
Remedial Exercises	478

SUNLIGHT DEPARTMENT :—

Treatments	1,733
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OPERATIONS :—

The number of major surgical operations performed under general anaesthetic (excluding dental, ear, nose and throat, and ophthalmic operations) was 418. Of these, 297 were abdominal sections.

HEMLINGTON EMERGENCY HOSPITAL.

This Emergency Hospital continued to function during the year, but gradually throughout the year there was seen an alteration in the type of patient being admitted. The number of service patients diminished and more and more use of the hospital was made by civilian sick. During the year the bed state was reduced from its overcrowded war-time figure of 480 to 280, allowing of better spacing between beds.

The hospital continued to be recognised by the General Nursing Council as a Training School for Assistant Nurses, but difficulty was still experienced during the year in obtaining a sufficiency of nursing staff to keep even the reduced number of beds open. Broadly speaking, the hospital probably worked to about 50% of its capacity and providing sufficient nursing staff can be obtained, will undoubtedly be a very important and valuable addition to the hospital resources of this area.

Transport to the hospital is still proving to be a difficulty, both for the public and the nursing staff, many of whom are non-resident. Steps are being taken to improve transport for the public and a special vehicle is being obtained for the transport of nursing staff.

Tribute should be paid to Dr. M. D. Leitch who retired from his position as Deputy Medical Superintendent on the 31st May, 1947, and to his successor Dr. P. W. Griffin, who commenced on the 7th July, 1947, and to the Matron and her nursing staff, who have done much to make this hospital popular with the public.

From the following figures it will be seen that the volume of work undertaken during the year has been considerable.

Service Patients	in Hospital, 1st January, 1947	..	41
..	Admitted .. .. .	..	293
..	Discharged to Units .. ..	..	282
..	Discharged to Home Address, Merchant Navy .. ..	..	3
..	Discharged to Home Address, On Leave .. .. .	..	12
..	Discharged Home on Demobilisation Leave .. .. .	..	5
..	Transferred .. .. .	..	13
..	Boarded .. .. .	..	10
..	Deaths .. .. .	..	..
..	Remaining in Hospital, 1st January, 1948 .. .. .	..	9

Ministry of Pensions' Patients in Hospital, 1st January, 1947	9
" " " " Admitted	8
" " " " Discharged Home ..	16
" " " " Remaining in Hospital, 1st January, 1948 ..	1
Transferred Civilian Sick in Hospital, 1st January, 1947 ..	28
" " " Admissions (L.C.C.) .. .. .	..
" " " Admissions (Hull Area)	4
" " " Discharged to Home Address ..	2
" " " Transferred	10
" " " Deaths	2
" " " Remaining in Hospital, 1st January, 1948	18
Civilian Patients in Hospital, 1st January, 1947	29
" " Admitted	405
" " Discharged to Home Address	352
" " Transferred	6
" " Discharged to W.L.A. Hostel, Stokesley	5
" " Deaths	2
" " Remaining in Hospital, 1st January, 1948	69
Admissions during 1947	710
Discharges during 1947	716
Deaths during 1947	4
Number of Operations during 1947	502
Number of Out-Patients during 1947	178
Average daily number of occupied beds .. ..(days)	38
Average daily number of occupied beds	103

Civilian Patients remaining in Hospital, 1st January, 1948, include :—

- 40 Tuberculosis Dispensary Cases.
- 21 North Ormesby Hospital Contributors.
- 1 Eston Hospital Contributor.
- 6 Middlesbrough General Hospital Cases.
- 1 War Worker.
- 18 Transferred Civilian. (16 L.C.C. and 2 Hull Area).
- 1 Ministry of Pensions' Case.

DENTAL DEPARTMENT :—

47 patients received 68 treatments.

EAR, NOSE AND THROAT DEPARTMENT :—

52 patients received 60 treatments.

OPHTHALMIC DEPARTMENT :—

5 patients received 6 treatments.

X-RAY DEPARTMENT :—

514 patients received attention.

1,094 films and screenings.

122 screenings.

PHYSIOTHERAPY AND REHABILITATION DEPARTMENT :—

142 patients received 2,909 treatments.

OCCUPATIONAL THERAPY DEPARTMENT :—

316 patients made 937 articles.



LABORATORY FACILITIES.

Whilst, in the main, general pathological work is carried out in a small way at each of the local hospitals, the setting up of the Area Pathological Laboratory at the General Hospital has filled a long felt want in this area and has meant the sending to this Laboratory of the major hospital pathology in this district. The Public Health Laboratory at Northallerton has continued to function in its particular sphere and all specimens of a public health nature have been sent to this laboratory. It is hoped that during 1948, it will be possible to set up a Public Health Laboratory in Middlesbrough in conjunction with the Area Pathological Laboratory.

I am indebted to Dr. F. J. Hallinan for the following figures of specimens sent to the Public Health Laboratory, Northallerton, from the Middlesbrough area, which shows the volume of work being done by this laboratory for this area :—

Throat and Nasal Swabs	..	..	..	3,342
Faecal and Rectal Swabs	..	..	..	629
Urine	..	..	..	101
Blood	..	..	..	262
Milk : 314 Graded, 6 Ungraded	..	..	..	320
Miscellaneous	..	..	..	1,464

I am indebted also to Dr. Stanley Wray, Pathologist in charge of the Area Pathological Laboratory for the following report on the work of his Laboratory :—

“ In April, 1947, the new Laboratory at the General Hospital was opened for use. Since then the year has been one of achievement and progress.

In the early stages of the new Laboratory, work was undertaken chiefly for the General Hospital, but then as expansion proved possible, other hospitals in the district asked for our assistance. Thanks to the loyal help given by the Local Authority and in particular, the Medical Officer of Health, at first Dr. Lloyd Hughes and later Dr. Elder, and to a very hard working and conscientious staff, all these requests were met. By the end of the year we were serving seventeen hospitals and institutions within an area of approximately 30 miles of Middlesbrough in addition to a growing domiciliary service. From very humble beginnings we achieved a monthly output by the end of the year of 7,681 units in the Hospital Laboratory itself and became responsible for 2,490 units in subsidiary Laboratories. This amount of work corresponds to a monthly average of 2,500 specimens examined.

During this development stage, we have also examined blood for grouping and Rhesus factor from all ante-natal patients from the Maternity Hospital and some of the Clinics in the district. This is an important step forward and is amply justifying itself. We hope to be able to go further with this scheme in the near future.

A great advance has been made with the Transfusion Service for this Area. The Laboratory has now been made responsible for this by the Regional Transfusion Service and has been equipped with one of the most modern refrigerator units. The main Blood Bank is now held at the General Hospital. Smaller banks are kept at the other larger hospitals in the district. This service works in close co-operation with the "Flying Squad" already established at the Municipal Maternity Hospital.

A further considerable benefit has been afforded the Coroners in and around Middlesbrough for investigations of medical legal problems. This service has been used to the full.

The investigations for the Special Treatment Centre are also now carried out in the Central Laboratory, which has been appointed as an approved Centre for this work by the Ministry of Health.

Plans are being made for the further extension, not only of the Central Laboratory service, both in scope and building, but also in the subsidiary laboratories served by this organisation. By this means, we hope to achieve a more intimate co-operation between the hospitals staffs and the pathological service.

We can be justly proud of our combined achievements during this past year and look forward to further developing the amount and scope of work in the coming year."

Chemical analyses continued to be carried out by the Borough Analysts, Messrs. Jackson and Scholes.

Bacteriological and chemical examinations of samples of water were also carried out at the Tees Valley Water Board's Laboratories by Dr. E. V. Suckling of the Counties Public Health Laboratory.

Details of water examination are referred in the section devoted to Water Supply on pages 55 to 57.

TREATMENT AT SPECIAL CENTRES.

During the year continued use was made of the facilities offered to patients in the Middlesbrough area to receive specialist treatment at Special Centres where facilities did not exist locally. These facilities have been much appreciated by medical practitioners and patients alike.

I append a statement of the number of people referred to such centres.

			Male	Female	Total
			—	—	—
Shotley Bridge					
Emergency Hospital	Thoracic Surgery		15	7	22
Shotley Bridge					
Emergency Hospital					
and the Royal					
Victoria Infirmary	Cancer	15	19	34	
Royal Victoria	Plastic Surgery				
Infirmary	Surgery	2	3	5	
	Dermatology ..		1	1	
Newcastle General	Neuro-surgery ..	30	17	47	
Hospital	Genito-urinary ..	1	1		
	Total	62	48	110	

NURSING HOMES.

	No. of Homes	No. of beds provided for :		Total
	—	Maternity	Others	—
Homes first registered				
during the year ..	Nil.	..	..	..
Homes on the Register at				
the end of the year	1	8	..	8

The only Nursing Home registered is the Ascot Nursing Home which has been inspected and found to comply with the Regulations.

Exemption from registration was granted in the case of the North Riding Infirmary, the North Ormesby Hospital and the Carter Bequest Hospital.

MENTAL DEFECTIVES.

The Middlesbrough Corporation is a partner in the Prudhoe Hall Colony Joint Board. On the 31st December, 1947, 128 Mental Defectives were in residence there. The Education Committee have a Special School for Mental Defectives at which 66 Boys and 82 Girls are in attendance. Other mental defectives were receiving institutional treatment on the 31st December, 1947, as follows :—

Holgate Institution	..	..	..	..	5
Rampton State Institution	..	..	..	..	4
Lisieux Hall	..	..	..	..	4
West Hartlepool Public Assistance Institution					2
St. Joseph's Home	..	..	..	..	2
Moss Side Institution	..	..	..	..	3
Etloe House	..	..	..	..	1
Royal Albert Institution	..	..	..	..	1
Feld Heath House	..	..	..	..	1
Whittingham Hall	..	..	..	..	2
Monkton Hall Home	..	..	..	..	1
South Shields Public Assistance Institution	..				1
Bishop Auckland Public Assistance Institution					1
Harton Institution	..	..	..	..	1
Howbeck House	..	..	..	..	2

Number of Patients on Licence at the end of the year were :—

From Prudhoe Hall Colony	..	14
Lisieux Hall	..	1
Total	..	<u>15</u>

After-Care.—During the year “After Care” visiting was undertaken by the Local Voluntary Association in the case of the following patients :—

Males	..	187
Females	..	154
Total	..	<u>341</u>

Upon investigation the following Patients were found to be :—

			Male.	Female.
			—	—
Working	..	..	123	72
At home, not working		..	19	51
Unemployable	..	..	31	22
In H. M. Forces	..	..	4	1
Not Known	..	..	4	7
M. Navy	..	..	3	..
Imbecile	..	..	2	..
Evacuated	..	..	1	..
Land Army	..	..	..	1
			—	—
Total	..	..	187	154

Occupation Centre.

During the year, 17 patients were employed at the Occupation Centre, viz., 15 Males and 2 Females.

INSULIN.

The scheme of supplying Insulin to diabetics is becoming more widely known and during the year there were 15 new applicants. There are now 30 patients taking advantage of the facilities afforded.

MATERNITY AND CHILD WELFARE.

MUNICIPAL MATERNITY HOSPITAL.

The Municipal Maternity Hospital situated in Park Road North, provides the following accommodation :—

Number of Maternity beds	..	..	..	50
Ante-Natal beds	..	..	..	5
Isolation beds	..	..	..	3

The following figures outline the work carried out at the Hospital during the year :—

Total number of Maternity cases admitted	..	1,485
Ante-Natal cases admitted	..	234
Total number of deliveries :		
Live Births	..	1,154
Still births	..	91
Total number delivered by midwives	..	1,108
Total number delivered by doctors	..	137
Average duration of stay of cases in hospital :—		
(a) in ante-natal beds	..	5.3 days
(b) in lying-in wards	..	12.03 days.
Number of cases notified as Puerperal Pyrexia	..	44
Number of cases notified as Pemphigus	..	9
Number of cases notified as Ophthalmia Neonatorum		2
Maternal deaths	..	1

It will be seen from the above that the pressure on the beds referred to in previous reports has been maintained during the year.

The priority system, whereby cases are admitted only if they come within certain categories has been continued so that the accommodation at the hospital is put to the best possible use.

The types of cases admitted are :—

- (a) Abnormal Cases.
- (b) Cases requiring Caesarean section.
- (c) Cases where home circumstances are unsatisfactory.
- (d) Primiparae.

Whilst the position cannot be completely eased until extensions are built, initial steps were taken to set-up a Maternity Annexe at Hemlington Hospital and it is hoped that this will be open and available for use in 1948. More and more use has been made of the hospital for emergency admissions of patients from outside Authorities and the following table is of interest to show the increase which has taken place over the last 9 years in such admissions from the North Riding area and from Thornaby.

Year	North Riding.	Thornaby
—	—	—
1939	52	..
1940	48	8
1941	82	10
1942	114	11
1943	108	9
1944	112	16
1945	155	25
1946	154	22
1947	170	48

It is hoped that when the Regional Hospital Board take over in 1948, consideration will be given to the needs of Middlesbrough patients for this hospital and that no greatly increased use of it by outside Authorities will be encouraged until more beds are available. Otherwise it might mean that the citizens of Middlesbrough who had the foresight to provide this hospital for themselves may suffer severely due to the lack of facilities available in surrounding Authorities' areas.

Reference has already been made to the retirement of Dr. G. F. Longbotham and to the appointment of Mr. Bryan Williams, but it is appropriate at this point once more to pay tribute to the work of both these gentlemen at the hospital and to the untiring efforts of the Matron.

ANTE-NATAL CLINICS.

Ante-Natal Clinics continued to be held at the hospital four mornings weekly. Patients booked for delivery at the hospital attended regularly as required by the Medical Officer. Women who are being confined at home by Municipal or Private Midwives are also sent by arrangement.

	First Visits	..	1,258
Number of attendances :—	Revisits	..	7,563

Of the number of mothers in Middlesbrough who gave birth to children during the year 33.97% paid at least one visit to the Hospital Ante-natal Clinic.

POST NATAL CLINICS.

The Post-Natal Clinic is held at the Hospital on one afternoon per week. The total number of attendances during the year was 793 which is a pleasing increase on the figure for 1946 of 536.

Caesarean Sections.

Number of Caesarean sections during 1947	..	43
Booked cases	.. .. .	27
Middlesbrough emergencies	.. .. .	6
North Riding emergencies	.. .. .	8
Thornaby emergencies	.. .. .	2

Maternal Deaths.

Number of maternal deaths	.. .. .	1
Cause : Shock and exhaustion due to difficult labour.		

Still births.

Number of still births	.. .. .	91
Causes :—		
(a) Maternal health and Rhesus Factors.		
Toxaemia	.. .. .	20
Eclampsia	.. .. .	2
Toxaemia and Anaemia	.. .. .	2
Severe Anaemia	.. .. .	1
Advanced heart disease, toxaemia and anaemia	.. .. .	1
Heart disease	.. .. .	1
Coal-gas poisoning	.. .. .	1
Syphilis	.. .. .	1
Rhesus Factor :	.. .. .	5
(b) Obstetrical Complication Factor.		
Placenta Praevia	.. .. .	7
Unexplained ante-partum haemorrhage	.. .. .	4
Premature separation of placenta	.. .. .	1
Prolapse of Cord	.. .. .	1
Cord round the neck	.. .. .	3
Operation on cervix during pregnancy	.. .. .	1
Asphyxia due to inspissation of mucus in uterus	.. .. .	1
Forceps delivery	.. .. .	1
Malpresentations	.. .. .	10
Breech	.. .. .	6
Transverse	.. .. .	2
Face	.. .. .	1
Occipito-posterior	.. .. .	1

(c) Infant Factor.					
Abnormalities .. .. .	..	..	..	..	10
Hydrocephaly .. .. .	..	..	..	..	7
Anencephaly .. .. .	..	..	..	..	3
Prematurity .. .. .	..	..	..	..	5
(d) Combined Factors.					
Toxaemia of mother and abnormality of infant .. .. .	..	..	..	..	3
Toxaemia of mother and placenta praevia					1
(e) Unknown Factor.					
Unknown Causes .. .. .	..	..	..	..	9

These figures show that exclusive of the Rhesus factor 31.87% of still-births were due to the condition of the mother's health during pregnancy; toxaemia of varying degrees of severity being the chief complaint. To account for the incidence of toxaemia would require precise information on the mother's previous medical history, her home circumstances, her diet during pregnancy and details of ante-natal care.

An effort has been made to collect information on this latter factor, but it has not been possible in about one-third of the cases to obtain a satisfactory record of ante-natal care as the patients were admitted to the Hospital from areas outside the Borough. Of the local cases two-thirds did not have adequate supervision in the ante-natal period chiefly because they failed to attend ante-natal clinics when asked to, or because they disregarded the advice given. In the remainder it seemed impossible to prevent the onset of toxaemia or there was some complication which contributed to the still-birth.

Neo-Natal deaths.

Number of Neo-Natal deaths	35
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Certified causes of death.

Prematurity	15
Prematurity and Atelectasis	2
Causes Unknown	6
Causes Known	11
Placenta praveia	4
Toxaemia of Pregnancy	1
Chronic Renal Disease	2
Thyrotoxicosis in Mother	1
Twin Pregnancy	2
Fall at 26 weeks	1

Atelectasis	7
Cerebral Haemorrhage	4
Forceps Delivery	2
Prolonged Labour	1
Rupture of Aneurysm of Circle of Willis	1
Congenital Heart Disease	2
Circulatory Failure	1
Asphyxia	2
Asphyxia Pallida due to prolapsed cord	1
Inhalation of Liquor Ammonii	1
Haemorrhagic Disease of the New Born	1
Erythroblastosis Foetalis	1
Puerperal Pyrexia	44
Ophthalmia Neonatorum	2
Pemphigus	9

Puerperal Pyrexia.

Of the forty-four cases of Puerperal Pyrexia notified from the Municipal Maternity Hospital, thirty-six were Borough residents and eight were from outside areas. Thirty-four of the local cases were delivered in the Hospital and two were admitted after delivery. Nineteen cases were transferred from the Maternity Hospital to West Lane Fever Hospital, two to the General Hospital and one to St. Luke's Hospital.

The table given below shows the variety of causes of pyrexia, or rise of temperature, in the cases notified. The number transferred to the Fever Hospital represents those cases in which a true infection was suspected and where in the interests of the other patients in the Maternity Hospital removal had to be carried out.

In fourteen of those cases examination by bacteriological methods was carried out, but in only six cases was there proof of any infecting organism including one causing an intestinal infection from which the patient had suffered before admission.

The incidence of pyrexia—42 cases out of the 1,245 actually delivered in the hospital or 3.37% is not a high one, as in many cases, it was an inevitable reaction to some complication. One has to take into account also the emergency nature of a considerable proportion of the work, and the fact that cases may have been infected before admission.

Causes of Pyrexia :—

Endometritis	..	..	..	..	..	10
Pelvic Cellulitis	..	..	..	..	..	1
Pelvic Peritonitis, Ruptured Salpinx	..					
Breech, Ante-partum Haemorrhage	..					1
Local Sepsis	..	..	..	..	..	2
Thrombosis of Pelvic Veins	..	..	..	..	..	1
Small Embolus from Leg	..	..	..	..	..	1
Hydronephrosis and Bacillus Coli Infection	..					1
Metritis and Mastitis	..	..	..	..	..	1
Severe Anaemia, Blood Transfusion	..	..	..	..	..	2
Toxaemia and Accidental Haemorrhage, Blood Transfusion	..	..	..	..	..	1
Heart Disease, Anaemia, Toxaemia, Accidental Haemorrhage	..	..	..	..	..	1
Retained Placenta, Blood Transfusion	..					3
Pneumonia	..	..	..	..	..	1
Food Poisoning	..	..	..	..	..	1
Puerperal Mania	..	..	..	..	..	1
Episiotomy	..	..	..	..	..	2
Difficult Delivery	..	..	..	..	..	4
Breech	..	..	..	2		
Forceps	..	..	..	2		
Caesarean Section, Obstructed Labour	..					1
Undetermined Causes	..	..	..	..	..	9

Bacteriological Findings.

H. S. Group A.	..	..	3
H. S. & B. Coli	..	..	1
Staph. Aureus	..	..	1
Salmonella Typhi-Muriun	1		

MIDWIFERY.

Midwives.

The number of Midwives who in January, 1947, notified their intention to practise in Middlesbrough was 52. This number included the Supervisor of Domiciliary Midwives, one part-time domiciliary midwife, 6 in private practice, 13 on the staff of the Municipal Maternity Hospital and 10 on the staff of the Middlesbrough General Hospital.

Out of a total number of 3,745 births notified in the area, 3,426 were attended by midwives. In the remaining 319 cases the midwives acted as maternity nurses. The number of cases in which Medical Aid was summoned by district midwives under Section 14 (I) of the Midwives Act, 1918, was 600.

Domiciliary Midwifery Service.

At the beginning of the year, there were 22 domiciliary midwives including one employed part-time and one Supervisor of Midwives. During the year, 3 midwives resigned and 5 were appointed, making a total at the end of the year of 24 midwives and one Supervisor.

The services of the midwives were again allocated to six districts, thus :—

North Ormesby and Brambles Farm			
Estate	.. .. .	..	4 midwives
Central Town District	.. .. .	..	5 "
Newport and Cannon District	.. .. .	..	8 "
Ayresome and Linthorpe District	.. .. .	..	3 "
Acklam District	.. .. .	..	2 "
Grove Hill District	.. .. .	..	2 "
Total number of Bookings	.. .. .	..	2,451
Total number of Deliveries	.. .. .	..	2,175

The total establishment of midwives provided for was 26, exclusive of the Supervisor, but at no time during the year was this number of staff reached. The maximum number at any one time was 24 and then only for a period of five months.

Had this figure pertained throughout the year, the average number of deliveries per midwife would have been 95. In actual fact the work was rather heavier during the first half of the year when the number of staff was 21 or 22, than when there was an increase to 24. The average number of deliveries per annum per midwife was too much in excess of the figure 66 recommended by the Rushcliffe Committee as to allow for adequate ante-natal care as well as attention at confinements.

Deliveries by Midwives during 1947.

Domiciliary Midwives	..	..	2,175
Maternity Hospital Midwives	..	..	1,108
Private Midwives	..	..	143
Total	..	..	3,426

Attendances at Deliveries acting as Maternity Nurses.

Domiciliary Midwives	..	..	124
Maternity Hospital Midwives	..	..	137
Private Midwives	..	..	27
Midwives in other Institutions	..	..	31
Total	..	..	319

Puerperal Pyrexia.

The number of cases of Puerperal Pyrexia occurring in mothers delivered on the Borough districts was 17. Thirteen of the patients were admitted to West Lane Fever Hospital, one to the Middlesbrough General Hospital from which she was transferred to West Lane, three were nursed in their homes, two of the latter by Municipal Midwives and the other by a nurse from the District Nursing Association.

The causes of the pyrexia have been classified as follows :—

Endometritis	..	..	..	5
Pelvic Cellulitis	..	..	..	1
Local Sepsis	..	..	..	1
Ragged Membranes	..	..	..	2
Acute Mastitis	..	..	..	1
Coryza	..	..	..	1
Influenza	..	..	..	1
Administration of Sulphonamide	..	..	..	1
Difficult Delivery (Forceps)	..	..	..	1
Undetermined Causes	..	..	..	3

Of the fourteen cases admitted to West Lane Fever Hospital bacteriological examination was carried out in seven cases, with the result that a definite causative infection was found in five cases.

As there were 2,278 mothers delivered on the districts including the two admitted to West Lane Fever Hospital immediately after delivery the incidence of pyrexia among the domiciliary cases was 0.75%.

Bacteriological Findings.

H. S. and B. Coli.	1
H. S. Group A.	1
Staph. Alb.	2
B. Coli.	1
	<hr/>
	5

Still Births.

Total number of Still Births in the Borough	140
Number already recorded under Municipal Maternity Hospital	91
Number of Still Births in the Districts	49

Causes :—**(a) Maternal Health factor :—**

Toxaemia of Mother	2
General ill-health of Mother	3
Syphilis	1

(b) Obstetrical Complication Factor :—

Prolapse of Cord	1
Short Cord	1
Cord round Neck	3
Pressure on Cord	1
Forceps Delivery	1
Malpresentations	7
Breech	5
Breech with Cord round Neck	1
Occipito-posterior with Forceps Delivery	1

(c) Infant Factor :—

Malformation	8
Anencephaly	3
Hydrocephaly	3
Hydrocephaly and Spina Bifida	1
Enlarged Liver	1
Prematurity	3

(d) Unknown Factor :—

Unknown Causes	18
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Neo-Natal Deaths.

Total Number of Neo-Natal Deaths in the Borough	117
Number already recorded under Municipal Maternity Hospital ..	35
Number of Neo-Natal Deaths in the Districts	82

Certified Causes of Death :—

Prematurity	52
Causes Unknown	27
Causes Known	25
Cardiac Failure in Mother	2
Pneumonia in Mother	3
Bronchiectasis in Mother	1
Infective Hepatitis in mother	1
Fall during Pregnancy	1
Haemorrhage during Pregnancy	2
Twin Pregnancy	15
 Atelelectasis	 2
Cerebral Haemorrhage following Birth Injury	4
Congenital Heart Disease	2
Broncho-pneumonia	4
Haemorrhagic Disease of the New-born	2
Erythroblastosis Foetalis ..	3
Congenital Syphilis, Cirrhosis of Liver	1
Gastro-Enteritis	3
Pemphigus Neonatorum with Gastro-Enteritis	1
Ophthalmia Neonatorum with Marasmus	1
Laryngismus Stridulus	1
Asphyxia due to inattention at Birth	1
Jaundice	1
Congenital Malformations ..	4
Unspecified	1
Spina Bifida	2
Cleft Palate and Dropsy	1

Deaths in the Neo-Natal period, that is within the first four weeks of life, accounted for 47% of the deaths of infants under one year, a decrease of 18% on the percentage in 1946. Of these neo-natal deaths, prematurity was the certified cause in 57%.

Maternal Deaths.

Total Number of Maternal Deaths in the Borough	3
Number already recorded under Municipal Maternity Hospital	1
Number of Maternal Deaths in the Districts ..	1
Number of Maternal Deaths in Hospitals other than the Maternity Hospital ..	1

One of these patients was not a Middlesbrough "resident." The Maternal Death Rate for the Borough shows the low total rate of 0.55 per 1,000 births. For the Maternity Hospital the death rate was 0.27 per 1,000 total births in the area and 0.8 per 1,000 deliveries.

HOME HELP SCHEME.

During the year it was possible to maintain an average of twelve Home Helps to give domestic help following confinements. The maximum number enrolled was seventeen and the lowest number eleven. The service worked successfully and was able to meet all demands made on it.

The following are the details of the year's work :—

Bookings	235
Cases attended	155
Cancellations	31
Cases still on the books at the end of the year	49

HEALTH VISITING.**Health Visitors.**

During 1947, there has been a number of resignations as well as appointments made on the Health Visiting staff. Although we began 1947 with 7 full-time Health Visitors, 1 part-time Health Visitor and a Superintendent Health Visitor and finished the year with 8 full-time Health Visitors and a Superintendent Health Visitor, the staff was reduced considerably between May and September.

Help had to be obtained from the Public Health Nurses of the Department to enable us to staff the Infant Welfare Centres. In consequence, the work of the Health Visitors had to be drastically curtailed. This is shewn markedly in the reduction of home visits paid, and there is also the fact to be acknowledged that the visits themselves were in many cases less valuable than they should have been owing to the shortness of time that the individual Health Visitor could give to each visit.

From March to December, Linthorpe area was without a Health Visitor, as were North Ormesby and Cargo Fleet districts from May until the middle of September. From January until the 1st November, Cannon and Newport areas were also without Health Visitors. This meant that Health Visitors from other districts who were already trying to visit numbers far in excess of previous years had to cover these four large areas so far as primary visits to new births were concerned.

Home Visiting.

There has been a total of 3,745 births. Every attempt has been made to do the primary visits on the fifteenth day or as soon as possible afterwards, and 3,545 of these were paid.

In the early part of the year an attempt was made to modify the home visiting system throughout, and to omit all visits to children between three and five, except where such a visit was incidental to one to a smaller child or where a special visit was called for, but as the year went on even such a drastic modification as this completely broke down, and the Health Visitors' time was to a large extent taken up with the primary and premature baby visits, and in staffing the Infant Welfare Centres. That the routine home visits generally decreased alarmingly in spite of very great effort on the part of the staff is obvious from a comparison of the figures for 1947 with the three previous years.

	1947	1946	1945	1944
Birth Enquiry or First Visits	3,545	3,217	2,542	2,724
Visits to children 0—1 (excluding above) ..	7,660	13,134	12,309	13,394
	<hr/> 11,205	<hr/> 16,351	<hr/> 14,851	<hr/> 16,118
Visits to Children 1—5 ..	11,083	20,576	20,906	22,340
Visits to Expectant Mothers	190	385	45	120
{ *Visits to Special Cases	127			211
		210	197	
{ *Infant Death Enquiries	116			82
Ante-Natal Investigations	305			
†Evacuee visits which included children and the aged			340	
Ineffectual Visits	2,334	4,921	4,606	4,535
	<hr/>	<hr/>	<hr/>	<hr/>
Total	14,155	26,092	26,094	27,288†
Total 0—1	11,205	16,351	14,851	16,118
	<hr/>	<hr/>	<hr/>	<hr/>
Grand Total	25,360	42,443	40,945	43,406

*During 1945 and 1946, Visits to Special Cases and Infant Death Enquiries were classified under one heading.

†Evacuee visits were carried out during 1945 only.

The investigation of all new cases applying for admission to the Municipal Maternity Hospital where any doubt has existed as to their need for priority consideration, has been undertaken by this department and shared by the staff. 305 visits have been made during which advice on ante-natal care and suggestions for making a home confinement possible have been given.

The two camps of "Squatters" have been visited regularly during the year.

Efforts have been made to keep trace of children moving out of the area and 448 children have been transferred out to other local authorities.

The number of children recorded as received from other authorities was 355.

A certain number of children have been lost sight of and those such whose records are in this department dating from 1943 number 530. An analysis of this number in age groups is as follows:—

0—1	1—2	2—3	3—4	4—5
<hr/> 22	<hr/> 97	<hr/> 123	<hr/> 144	<hr/> 144

This is a small figure when one considers the under five child population approximately 13,500 with its fluctuations of transfers out of and into the Borough for which the Department has been responsible during these five years.

Child Life Protection and Adoptions.

This year the department has taken over the work of Child Life Protection and the arranging and supervision of cases for Adoption within the area.

There were ten foster-mothers on the register at the end of the year, each of whom had the care of one child. Not all the homes are of a very good standard, but owing to a great unwillingness of people to offer as foster-parents, there is little we have been able to do but accept the person chosen by the parent, and by constant supervision and encouragement, endeavour to improve matters.

During the year the number of visits and interviews arranged in relation to adoptions was 389. The children for whom this department was third party or was asked by other Authorities or Adoption Societies to assume responsibility for children being transferred into the Borough have been carefully supervised. The number of children in whose care this department participated and for whom Court Orders legalizing the adoptions were signed was 36.

N.S.P.C.C. Cases.

Visits to children under the care of the N.S.P.C.C. Inspector have again been paid, either at the request of the Inspector or as part of the special supervision given from this department to such cases. The Medical Officers, Superintendent Health Visitor and Health Visitors have all taken their part in this visiting. On two occasions the Senior Assistant Medical Officer, and on one occasion the Assistant Medical Officer gave evidence in Court when parents were convicted of neglect.

A Health Visitor has been teaching "Mothercraft" one evening per week at the Hugh Bell School; part of the practical work has been taught at the American Red Cross Centre. At the end of the year the class was still in progress.

Boarded-out Children chargeable to the Social Welfare Committee.

There were 13 children boarded-out within the County Borough of Middlesbrough. 11 of the children are with relatives and 4 of these are re-chargeable to other authorities.

The children boarded-out are visited at least once each month and such visits are recorded on the respective case papers.

Premature Births.

There has been a steady increase in the number of premature infants since 1945, when we first began to keep separate records. The numbers for these years are as follows:—

1947	1946	1945
—	—	—
244	216	180

The routine practice of paying two visits in the first four weeks of life has been continued in most cases, but it is regretted that the pressure of new births and the very limited staff has made it difficult to visit as often as the frailty of the infant demanded.

These births are classified as follows:—

Born at Home	..	..	..	..	..	144
Nursed at Home and died within 24 hours	..	13				
.. .. Survived 24 hours, died						
.. .. within 4 weeks	..	8				
.. .. Survived 4 weeks	..	96				
Removed from Home and died within						
.. .. 24 hours	..	Nil				
.. .. survived 24 hours, died						
.. .. within 4 weeks	..	22				
.. .. survived 4 weeks	..	4				
.. .. before one month—						
.. .. transferred	..	1				
						144

Born in Hospital	100
Born in Hospital and died within 24 hours ..	14
.. .. . lived 24 hours, died within 4 weeks	10
.. .. . survived 4 weeks	64
.. .. . transferred alive before 4 weeks	12
—	100

For the special care of premature babies, hot water bottles can be obtained on loan from the Department and Midwives have been supplied with special feeders, mucus catheters and subclinical thermometers.

CHILD WELFARE CENTRES.

The Child Welfare Centres were closed during four weeks in August.

It has been difficult at times during the year to find enough staff to enable the Centres to function and help was given by the Public Health Nurses attached to the Health Department.

Details of the attendances are given below :—

Number of Children 0—1 attending for the first time	2,353
Number of Children 1—5 attending for the first time	136
Total number of attendances of children 0—1	19,236
Total number of attendances of children 1—5	2,301
	<hr/> 21,537 <hr/>
Number of Children examined by Doctor	4,004
Number of Children advised by Health Visitors	20,560
Number of Sessions	458

The following table shows the attendances made during the year at each Centre :—

	0—1	1—5
Elizabeth Purvis	3,358	511
Cannon	3,075	357
Ayresome	4,185	372
American Red Cross ..	1,671	235
Whinney Banks	2,465	341
Grove Hill	2,386	266
North Ormesby	2,096	219
	<hr/> 19,236 <hr/>	<hr/> 2,301 <hr/>

Number of Children recommended for special treatment from Child Welfare Centres ..	276
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These may be classified as follows :—

Artificial Sunlight Clinic ..	76
Orthopaedic Clinic (Central School Clinic)	51
Orthopaedic Clinic (General Hospital)	43
Ophthalmic Clinic (Strabismus 24) (Others 22)	46
Ear, Nose and Throat Clinic ..	14
Dental Clinic	10
Skin Clinic	8
T. B. Clinic	8
Orthoptic Clinic	3
Speech Clinic	2
Child Guidance Clinic	2
For X-ray examination	6
To Newcastle Royal Victoria Infirmary	7
	<hr/> 276

The cases referred to Newcastle were :—

Cleft Palate ..	4
Naevus	3

It was decided in September to open the Whinney Banks Centre on an appointment basis. This has been much appreciated by the mothers attending as it has meant in the main an avoidance of delay and a quieter atmosphere has resulted from there being a limited number of mothers and children in the building at any given moment.

It has been necessary to discourage weekly or fortnightly visiting, where the child has been satisfactory and appointments of 3-4 or 6 weeks ahead have been made. This has enabled the Health Visitor to spend a little more time on each child and mother attending and as the home visits in the area served by Whinney Banks have been greatly reduced this has been found to be necessary for advice and teaching. The mothers have been told that if for any reason they require advice before the date of their appointment it is quite in order for them to attend. No hardship is therefore experienced by the system.

Following talks to the mothers at North Ormesby Centre, explaining the system, and a Press notice from the Health Department, this Centre was put on an appointment basis towards the end of the year. It is too early to report on the success or otherwise of the scheme at the moment.

The work of the Department as a whole and that of the Centres in particular has been improved by the appointment of two Centre Attendants. These Attendants work twenty hours per week and their duties include weighing of infants at some Centres charting of weights and the care of stores and linen. In view of the shortage of trained staff their work has been most valuable and whilst in no case can they be used as a substitute for qualified Officers, they have been able to relieve the Health Visitor of clinic preparation and certain routine matters and to enable her to give a more detailed attention to the mothers and infants. They have also relieved the Superintendent Health Visitor of the distribution of stores and the repair of linen.

Appointment of Assistant Medical Officer for Maternity and Child Welfare.

On 8th January, 1947, Dr. Joan Crook who had been appointed part-time Assistant Medical Officer, took up duty and conducted one ante-natal and one child welfare clinic per week. Later when the increased work at the Maternity Hospital debarred the Resident Medical Officer from continuing to attend at outside clinics, Dr. Crook took over these clinics also. Dr. Crook resigned from her post on 12th October.

Prior to Dr. Crook's resignation, Dr. Elizabeth Webster was appointed whole-time Assistant Medical Officer. She commenced duty on 1st September. Dr. Webster's time has been divided among ante-natal and child welfare centres, assisting at ante-natal clinics at the Maternity Hospital, examination of children in the Day Nurseries and for a small proportion of the time assisting in the Departmental Office.

District Ante-Natal Clinics.

From 9th January, 1947, the ante-natal clinics which up till that date had been held fortnightly at American Red Cross and North Ormesby were conducted weekly and from 4th November, 1947, the Grove Hill Centre, where there had also been a fortnightly clinic was held weekly. Thus at the end of the year, there were eight sessions every fortnight in place of the former five per fortnight. The comparative figures for 1946 and 1947 given in the table below, show the notable increase in both first and re-attendances at American Red Cross and North Ormesby Centres.

The number of women who made at least one visit to a district ante-natal clinic represents 30.12% of the total number who gave birth to children during the year.

			1947	1946
Cannon Street Clinic	1st Attendances ..		437	478
	Re ..		1,002	875
"American Red Cross Clinic	1st Attendances ..		217	122
	Re ..		527	131
Grove Hill Clinic	1st Attendances ..		248	253
	Re ..		552	406
North Ormesby Clinic	1st Attendances ..		214	154
	Re ..		415	245
" " "	1st ..		1,116	1,007
Total	Re ..		2,496	1,657
			<hr/>	<hr/>
			3,612	2,664
			<hr/>	<hr/>

During March, a beginning was made to post-natal work, the mothers being seen at the same session as the ante-natal cases. A total of 75 mothers attended post-natally, 69 at American Red Cross Centre and 6 at Grove Hill.

A further development of the work was the installation of routine blood testing. The numbers of tests which were carried out at the Area Laboratory at the Middlesbrough General Hospital were 126 Kahn and 109 for the Rhesus factor. As 10 gave a Rhesus negative blood, samples from the husbands were obtained where possible and 5 such were taken.

Number of expectant mothers recommended for further examination or treatment ..	151
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Expectant mothers referred for X-ray examination	74
" " " to Consultant Obstetrician	47
" " " " General Hospital ..	3
" " " " Clinical ..	
" " " " Tuberculosis Officer ..	3
" " " " Dental Clinic	22
" " " " Skin Clinic ..	2
	<hr/>
	151

The number of breast abscesses in Nursing Mothers reported during the year was 2. There were 3 other cases of mastitis.

Convalescent Treatment—Mothers and Babies.

The Yorkshire Homes for Mothers and Babies, one at Withernsea and one at Harrogate, were re-opened in 1946 for the summer months. Two mothers with their respective babies were admitted for two weeks. A third mother and her baby were also sent for convalescent treatment, but returned after a few days because the mother felt "unsettled" away from her home.

Illegitimate Children.

The following table shows the figures for illegitimate births for the past six years :—

1942	..	..	..	..	125
1943	..	..	..	..	190
1944	..	..	..	..	258
1945	..	..	..	..	223
1946	..	..	..	..	276
1947	..	..	..	..	227

There is still a definite need for a Hostel for Unmarried Mothers where they can live at least during the latter weeks of pregnancy when they are often unwelcome in their own homes, or to which they can return after the birth of their babies while seeking work or becoming fit for work. It is equally important that there should be a Residential Nursery for the children of a proportion of these mothers as often there are hasty and unsatisfactory arrangements made by the mothers for the care of these children.

The Day Nurseries have been made use of to a considerable extent by unmarried mothers who are in employment.

The only Home in the Borough which admits unmarried mothers is St. Teresa's Home, Borough Road, which is the Roman Catholic Diocesan Rescue Society's Home and where there is accommodation for six mothers and six babies.

Diphtheria Immunisation.

The percentage of children under five years of age who have been immunised has remained more or less stationary. The extent to which parents living in different parts of the Borough take advantage of the facilities offered them for

Diphtheria Immunisation is shown in the following Table of Health Visitors districts with corresponding immunisation percentage of children for whom records are in existence :—

Cannon	18.7%
Newport	26.6%
North Side	23.68%
North Ormesby	32.91%
Newlands	37.07%
Brambles Farm and Town Centre ..	37.30%
Whinney Banks	36.33%
Grove Hill	42.81%
Linthorpe	45.04%
Ayresome	52.55%

The Department took part in the propaganda for Diphtheria Immunisation by Health Visitors and the Immunisation Clerk being in attendance at the Odeon Cinema, when a film dealing with the danger of Diphtheria to children was shewn.

Orthopaedic Treatment.

In order to facilitate the examination and treatment of children requiring orthopaedic treatment the Committee agreed that such children could attend the Orthopaedic Clinic at the Middlesbrough General Hospital, the fee of 2/6d. to be paid by the Committee. It was agreed that for in-patient treatment the Committee would accept financial responsibility on the same basis as for children admitted to the Adela Shaw Hospital, Kirbymoorside. This scheme came into effect in September and enabled certain cases to be treated without waiting for the visits of the Orthopaedic Surgeon or his Assistant from the Adela Shaw Hospital. The number referred to the General Hospital is shown on page 47.

During the year 19 new cases were referred for examination by the Orthopaedic Surgeon from the Adela Shaw Hospital and 16 attended. 85 were invited for re-attendance and 65 attended. 6 children were referred for in-patient treatment and by the end of the year 3 of these had been admitted. 1 child who had been admitted the previous year was discharged.

Training of Health Visitors.

The subsidising of Student Health Visitors to which the Committee had agreed in November, 1946, was put into effect when in October, four students commenced training under the Health Department of the City of Newcastle-on-Tyne and two under the County of Durham Board for Training of Health Visitors.

National Certificate for Nursery Nurses—Training of Students.

The lecture courses for students from the Nursery Classes and from the Day Nurseries for the National Nursery Certificate were arranged through the Maternity and Child Welfare Department. The Senior Assistant Medical Officer took part in the lectures for Courses I and II and the Superintendent Health Visitor for Course II.

Infant Food Depot.

During the year, there were sold and distributed more than 50,000 packets of proprietary milk foods and vitamin foods as well as Ministry of Food products, from the premises at 28 Dunning Street.

Because of the congestion at rush periods, special consideration was given to the further adaptation of the premises and the removal to larger and more suitable accommodation without any satisfactory outcome.

Finally, the matter was deferred for future consideration in view of the impending changes under the National Health Service Act.

DAY NURSERIES.

Three Day Nurseries are maintained at the following places :—

Mosman Terrace, North Ormesby	60 places.
Parkside	60 places.
West Lane	60 places.

and have been fully utilised throughout the year.

Mothers who are compelled by domestic or financial reasons to take up employment, may have their children cared for at the Nurseries and in this way many women have been made available for essential work.

Children up to five years of age are accepted provided accommodation is available and a charge of 2/- per day is made for maintenance. This charge may be reduced when it is likely to result in financial hardship.

Each child has to be immunised against diphtheria before admission and regular medical inspection is undertaken by the Medical Staff of the Public Health Department.

The Nurseries have been approved for training purposes by the National Nursery Examination Board and Student Nurses are thus able to obtain their Nursery Nurses Certificate whilst employed in the Nurseries.

DOMESTIC HELP SERVICE.

This Service was introduced in 1945 and has gradually developed until during 1947, up to 15 Domestic Helps were engaged in providing assistance for families whose normal domestic arrangements were disrupted by illness or similar cause.

During the year, 82 families received help in this way and the Domestic Help Service has done excellent work and has established a high reputation. The period of assistance given depends on the nature of the case and the degree of need and is always subject to review, but the average duration of the period for which help is given is four weeks. Charges to householders are based on a sliding scale according to income.

Applications are made to the Public Health Department, Municipal Buildings, where the Domestic Help Service has been organised by a Senior Clerk in the Department. In preparation for the expansion of the Service under the National Health Service Act, 1946, as from 5th July, 1948, a full time Domestic Help Organiser has been appointed, who will co-ordinate the Service with the Home Help Scheme.

The following are details of the year's work :

Applications Received	..	..	..	86 cases.
Full-time Help given	..	..	..	79 cases.
Part-time Help given	..	..	..	3 cases.
Cancellations	..	..	..	4 cases.
Receiving attention at end of year	..	..	..	10 cases.

AMBULANCE SERVICE.

The vehicle strength of the Public Ambulance Service has been maintained at 4 ambulances and 1 sitting case car. Orders have been placed for 3 new ambulances and 1 new sitting case car to replace some of the older vehicles which continue to give fairly satisfactory service despite their ages which range from 17 years to 10 years. Good use was again made of the sitting case car, particularly for the conveyance of patients proceeding for special treatments in hospitals outside the Borough.

An extra service now provided by the Ambulance Service is that of receiving calls for the newly formed Obstetrical Flying Squad and providing the necessary transport for the Squad. Since the inception of the Flying Squad the Ambulance Service has been called upon three occasions.

The personnel strength of the Ambulance Service remained unchanged, viz., 7 male drivers ; 3 male and four female attendants and 2 male and 1 female telephonists. Both of the male telephonists are registered disabled persons.

As in previous years the ambulance staff continued to render valuable assistance on numerous occasions to the General Hospital, particularly at times when the Porter-Drivers employed by the hospital were not readily available.

The following figures show the work carried out during the year by the Ambulance Service :—

Number of calls	..	..	..	..	2,847
Number of Patients Removed	..	..	..	..	2,874

These figures are made up as follows :—

Street Accidents and Illnesses	..	..	..	..	317
Works Accidents and Illnesses	..	..	..	..	497
Maternity Cases	..	..	..	..	281
Private Removals	..	..	..	..	1,663
Police Cases	..	..	..	..	32
Coroner's Cases	..	..	..	..	84
Total Mileage	..	..	..	..	25,413 miles
Petrol consumed	..	..	..	..	2,530 galls.

Removals Outside the Borough.

Patients for special treatments were conveyed to and from hospitals outside the Borough as follows :—

Royal Victoria Infirmary, Newcastle	..	39 patients
General Hospital, Newcastle	.. ..	28 „
E.M.S. Hospital, Shotley Bridge, Co. Durham	41	„

Other private removals to hospitals and nursing homes outside the Borough included :—

West Hartlepool	..	..	..	5 patients.
Darlington	..	..	..	3 „
Winterton (Sedgefield)	..	..	..	2 „
Danby (Yorks)	..	..	..	1 „
Kirbymoorside (Yorks)	..	..	..	2 „
Whitby	..	..	..	1 „
Sunderland	..	..	..	2 „
Newcastle	..	..	..	1 „
Knaresborough	..	..	..	1 „
Bedlington (Northumberland)	..	..	..	1 „
Hexham	..	..	..	1 „
Ilkley	..	..	..	1 „

SECTION C.

SANITARY CIRCUMSTANCES IN THE AREA.

WATER SUPPLY.

Mr. T. S. R. Winter, Assoc.M.Inst.C.E., A.M.Inst.W.E., Engineer and General Manager of the Tees Valley Water Board, contributes the following information concerning the Middlesbrough water supply.

The water supply of the area has been satisfactory in quality and, to domestic consumers, in quantity.

Eight bacteriological samples of raw water were examined per month. The water is examined as it leaves the treatment works, and also at points in the area. Approximately 70 samples per month were taken for bacteriological examination, all of which were satisfactory. A summary of chemical and bacteriological analyses is enclosed.

The water supply is not liable to have any plumbo-solvent action.

The water is purified by slow sand filters, followed by treatment with ammonia and chlorine. Water which has been standing in open service reservoirs is also treated with ammonia and chlorine before passing into distribution.

SUMMARY OF CHEMICAL AND BACTERIOLOGICAL ANALYSES.

RIVER TEES SUPPLY, DARLINGTON.

Average Results—1947.

Appearance—Clear and bright.

Odour and Taste—Nil.

	Average	Maximum	Minimum
pH	7.4	7.6	7.1
Colour (Hazen)	40	130	15
Chlorine in Chlorides	9	13	6
Total Hardness	105	175	65
Temporary Hardness	78	125	40
Permanent Hardness	27	50	10
Total Alkalinity	78	125	40
Free Carbon Dioxide	5	7	3
Total Solids, dried at 180°C. ..	156	235	100
Nitrogen in Nitrates	0.6	2.0	0.0
Nitrogen in Nitrites	0.01	0.10	0.0
Free Ammonia	0.033	0.092	0.000
Albuminoid Ammonia	0.042	0.092	0.020
Oxygen Absorbed in 3 hrs. at 37°C.	3.67	10.00	1.40
Iron	0.09	0.20	0.3

Chemical Results expressed in parts per 100,000.

Bacteriological Results.

Bacteria on Agar at 37°C.				
per ml. 1 day	7	42	0	
Bacteria on Agar at 37°C.				
per ml. 2 days	11	55	2	
Bacteria on Agar at 20°C.				
per ml. 3 days	60	800	1	
Presumptive B.Coli per				
100 ml.	Nil.	1*	Nil.	
Cl. Welchii Reaction, 100 ml.	Present	Present	Absent	
Cl. Welchii Reaction, 10 ml. ..	Absent	Absent	Absent	

*Present on one occasion only.

LARTINGTON GRAVITATION SUPPLY.

Summary of Results—1947.

Appearance — Clear and Bright.

Taste and Odour — Nil.

	Average	Maximum	Minimum
pH	7.0	7.1	6.9
Colour (Hazen)	62	85	45
Chlorine in Chlorides	6	8	4
Total Hardness	48	55	35
Temporary Hardness	37	45	25
Permanent Hardness	11	25	5
Total Alkalinity	37	45	25
Free Carbon Dioxide	6	8	4
Total Solids, dried at 180°C. ..	84	100	70
Nitrogen in Nitrates	0.2	0.8	0.0
Nitrogen in Nitrites	0.01	0.01	0.00
Free Ammonia	0.053	0.150	0.000
Albuminoid Ammonia	0.059	0.096	0.036
Oxygen Absorbed in 3 hrs. at			
37°C.	5.53	7.50	3.60
Iron	0.13	0.23	0.05

Chemical Results expressed in parts per 100,000.

Bacteriological Results.

Bacteria on Agar at 37°C.			
per ml. 1 day	10	40	0
Bacteria on Agar at 37°C. per			
ml. 2 days	15	55	4
Bacteria on Agar at 20°C. per			
ml. 3 days	17	160	3
Presumptive B. Coli. per			
100 ml.	Nil.	1*	Nil.
Cl. Welchii Reaction 100 ml. ..	Present	Present	Absent
Cl. Welchii Reaction 10 ml. ..	Absent	Absent	Absent

*Present on one occasion only.

SEWERS AND DRAINS.

Drainage and Sewerage.

During the year the following works have been carried out :—

	Drains	Sewers
By Corporation ..	7,780 lin. yds.	9,420 lin. yds.
Private Enterprise ..	1,380 lin. yds.	780 lin. yds.
Total	9,160 lin. yds.	10,200 lin. yds.

The Chief Sanitary Inspector is responsible for the following Section :—

PUBLIC CLEANSING.

HOUSEHOLD AND TRADE REFUSE.

Collection.

There are 35,613 inhabited houses and shops in the town.

The collection of household refuse is made by 20 motor and 1 electric collection vehicles.

No charge is made for the collection of any trade refuse that has a commercial value, such as paper, tins, rags, etc.

Disposal.

During the year, 35,808 tons of refuse were disposed of as under, as against 36,194 tons during the previous year :—

Method of Disposal.	Tonnage	Percentage
Separation and Incineration ..	30,709	85.76
Food Waste Concentrator ..	1,145	3.20
Controlled Tipping	521	1.45
Barged to Sea	441	1.23
Organic Plant	344	0.96
Miscellaneous	2,648	7.40
Total ..	35,808 tons	100.00%

Of the 1,145 tons of Kitchen Waste treated in the Food Waste Concentrator, 402 tons were brought in from other Local Authorities.

The constituents of the refuse at the Refuse Disposal Works after separation were as follows :—

	Tons	Percentage
Dust	11,382	37.06
Cinders	2,863	9.31
Metals	522	1.69
Rags	4	0.01
Bones	4	0.01
Bottles	70	0.22
Paper	164	0.53
Miscellaneous	6	0.02
Balance to Fires ..	15,694	51.15
Total ..	30,709 tons	100.00%

The amount and value of materials recovered, including Organic Salvage, were as follows :—

	Weight.				Value.		
	Tons	Cwts.	Qrs.	Lbs.	£	s.	d.
Waste Paper	607	7	1	0	4,026	9	6
FERROUS METALS :							
“ Black ” Scrap ..	152	9	1	0	323	13	11
“ Destructor ” Scrap	1,171	17	0	0	2,647	9	3
NON-FERROUS METALS :							
	Tons	Cwts.	Qrs.	Lbs.	£	s.	d.
Aluminium Scrap ..	1	8	3	..	55	6	11
Copper Scrap ..	..	15	3	..	29	2	6
Brass Scrap	1	9	..	..	41	7	6
Zinc Scrap .. ..	..	4	1	..	2	11	0
Lead Scrap	1	1	1	..	53	2	6
Pewter Scrap .. ..	..	1	..	16	9	12	0
Textiles	4	..	..	..	29	3	8
Bottles, Jars, etc. ..	53	..	2	..	574	11	5
Cinder Fuel	1,108	19	..	..	554	9	6
Stable Manure	158	14	..	..	81	2	0
Concentrated Kitchen Waste	577	3	..	..	2,590	9	3
Bones	4	6	..	..	24	14	6
Fish Meal	72	15	..	..	1,329	9	6
Miscellaneous .. ..	..	16	2	..	7	11	6
Total	3,916	7	2	16	£12,443	6	5

The value of materials recovered, £12,443 6s. 5d., shows an increase, of £1,057 16s. 3d., compared with the total for the previous year, namely, £11,358 10s. 2d.

In addition to this, the Department have made a claim on the Board of Trade for £121 19s. 4d., on account of additional waste paper recovered above the amount for the year 1946.

Since the inauguration of the Separation Plant in 1939, the amount of materials recovered is £85,566 2s. 0d.

The costs of collection and disposal for the year 1947 from the figures in the Estimates supplied by the Borough Treasurer are as follows :—

	Total Cost.	Cost per Ton.	Cost per House
	—	—	—
Collection ..	£34,563	20/1d.	19/5d.
Disposal ..	£9,527	5/4d.	5/4d.

The 376 small bins distributed in 1946 to householders in a suburban district for the reception of Kitchen Waste, continued to give satisfaction to the householders.

Of the original 200 Communal bins in the streets, only 100 are in use. With the removal of the street air-raid shelters, it was impossible to find new sites, as a large number of houses abut on to 3 ft. and 9 ft. back streets in which it was impossible to site bins without causing obstruction.

Several bins were stolen, but it was not possible to apprehend the culprits.

During the inclement weather of January/March, a satisfactory collection service would have been maintained but for the action of householders in piling snow in the back streets, which caused grave inconvenience, not only to the refuse collectors, but to the householders themselves, as it was often found impossible for coal merchants and others to deliver goods.

I cannot speak too highly of the refuse collectors who carried out their duties in such a manner as to receive the approbation of the Health Committee by a special resolution of thanks.

During the year the collectors were provided with Protective Clothing (Coat and Shoulder Cape) without the surrender of personal clothing coupons.

On 1st August, two Motor Mechanics commenced the servicing of the Department's vehicles. Previously this was executed by a local garage. I am convinced that this alteration has been to the benefit of the Department. Vehicles which were previously off duty for days are often in commission again in a matter of hours as immediate attention is given to minor defects, which may if not attended have produced major complications.

The shortage of spare parts, and the difficulty of obtaining certain types of tyres led to serious delay which in normal times would never have occurred. Questions asked in Parliament regarding the supply of tyres did not bring any immediately tangible improvement in supply.

Despite all difficulties, a weekly collection service was maintained from April.

I would again draw attention to the amount of burnable cinder recovered from refuse (1.109 tons): in particular to the cost per ton for collection and the fact that during the inclement weather, 407 tons were sold to householders at 6d. per cwt. Householders should sift this useful fuel at the grate and not put it into the dustbin.

SANITARY INSPECTION OF AREA.

Description of Work carried out.

Number of Inspections made	..	..	9,030
Number of re-inspections made	..	..	10,259
Number of Food Inspections	..	..	1,799
Number of Interviews	..	..	275
Smoke Tests applied to new drains	..		219
Smoke Tests applied to old drains	..		17
Drains cleared with Cooper's Vacuum Pump			
(Free of cost to owners)	1,868

Notices Served include :	Nuisances Abated include :
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Drainage :

Cleanse and Repair	692	681
Defective Sink Waste Pipes			280	163
Defective yard gullies	..		50	34
Absence of gully grates	..		27	13
Defective gully covers	..		32	21

Waterclosets :

Burst water pipes	..	..	2,063	1,499
Defective basins	..	..	583	410
Defective cisterns	..	..	411	258
Defective doors	..	..	270	174
Dilapidated seats	..	..	158	104
Defective roofs	..	..	206	122
Defective joint between flushpipe and watercloset basin	..	..	123	80

Houses :

Defective roofs	1,372	847
Defective water spouts and fallpipes	1,677	1,156
Defective sinks	91	60
Accumulation of refuse or manure	3	3
Defective yard surfaces ..	141	73
Defective floors	279	180
Burst water service pipes	583	481
Dilapidated Dustbins ..	1,568	1,328
Defective chimneys	109	70
Defective ceilings	228	145
Defective sashcords and windows	577	325
Defective fireplaces	150	99
Defective fireranges ..	182	98
Defective walls	1,291	764
Defective ovens	6	5
Dilapidated setpots	102	58
Defective handrails	42	20
Defective flues	81	50
Defective yard doors ..	312	200
Defective back passage surfaces	3	2
Defective coalhouse doors ..	130	73
Defective coalhouse doorframes	61	44
Defective house doors ..	302	184
Absence of washing accommodation ..	241	175
Miscellaneous works not classified	418	278

Summary :— Notices served .. 8.965 to cover
14,844 nuisances.

Nuisances abated .. 10.277.

The rigid control of building materials and the Ministry of Health instructions, vide Circular 171/46, that property repairs would have to be deferred, has greatly retarded property repairs.

Property owners generally, realize that very little maintenance work was done to dwelling-houses during war years, owing to fear of demolition by the enemy, and that it was essential that their properties should be repaired, and were willing to execute the necessary repairs as required by the Department. These necessary repairs were mainly those to keep houses free from dampness, and the upkeep of amenities.

Representations were made to the Department for increased allocations of timber. Notwithstanding requests by the Town Council to the Timber Control, it was not found possible to increase the supply. Metal spoutings and fallpipes were also in such short supply that even some new houses stood for four months without having these necessary components fitted.

Between 1921—1924, 10,000 privy pan closets were converted to the water carriage system, and a vertical inlet basin was fixed. During the first quarter of the year a large number of these basins were found to be defective. The Ministries of Health and Works earmarked the output of British Standard Specification basins for new houses, and manufacturers were instructed to concentrate on these, with the result that very few of the type used in the Borough were produced. Owing to the restricted supply it can well be understood how it was that the Department were faulted by house tenants who were not in a position to understand.

Number of Housing Cards compiled	..	985
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The attention of the Borough Engineer has been called to the following defects :—

Apparently dangerous structures	..	18
Miscellaneous	.. .. .	8

Infectious Diseases.

During the year 915 houses have been inspected, incurring 76 re-inspections, compared with 761 inspections and 93 re-inspections last year, owing to cases of Infectious Disease (including Tuberculosis), and reports thereon have been made.

The number of inhabited rooms disinfected owing to cases of Infectious Disease was 1,399 as compared with 1,098 last year.

Offensive Trades.

Number on Register	..	..	..	..	29
Tripe Boiling	..	..	..	..	6
Fat Melting	..	..	..	..	6
Blood Drying	..	..	..	..	2
Fat Extracting	..	..	..	..	4
Size Making	..	..	..	..	1
Hide and Skin Dealers	..	..	..	..	1
Rag and Bone Dealers	..	..	..	..	8
Gut Scraping	..	..	..	..	1
Number of inspections	..	..	..	..	30
Number of Notices to limewash	..	..	..	..	5

The whole of the Offensive Trades on the Register have been conducted satisfactorily and in no instance where any minor alteration or improvement has been suggested has there been anything but a ready response to carry out the same.

Fish Friers :

Number on Register	..	..	..	126
Number in use	..	..	117	
Number not in use	..	..	9	
Number discontinued during the year	..	..	—
Number registered during the year	..	..	2	
Number of inspections made	..	..	205	
Number of notices to limewash	..	..	24	
Number of letters sent re minor contraventions, alterations to premises, etc.	..	..	42	

Rats and Mice Destruction Act, 1919.

The Voluntary Rat Club and the Official Rat Catcher have continued their operations against these pests as follows :—

	No. of Visits.	Rats Killed.	Baits Laid.	Mice Killed.
Official Rat Catcher	.. 2,598	3,733	1,466	459
Voluntary Rat Club	.. 108	570	..	..
Total	.. 2,706	4,303	1,466	459

SANITARY CONDITION OF THEATRES AND MUSIC HALLS.

There are 13 places of public entertainment within the Borough, 11 Cinemas and 2 Music Halls.

The Public Health Act empowers local authorities to inspect the sanitary condition of Cinemas, Music Halls, etc., and 31 visits were paid during the year, resulting in a good standard of cleanliness being maintained.

Hairdressers :

Section 286 of the Middlesbrough Corporation Act, 1933, makes it compulsory for all hairdressers and barbers to be registered with the Local Authority.

Number on Register	..	..	..	139
Number discontinued during the year	..	..	9	
Number registered during the year	..	..	11	
Number of change of occupiers	..	..	8	
Number of inspections made	..	..	33	
Number of letters sent re minor contraventions, alterations to premises, etc.	..	..	25	

In all cases where a new business has been established, wash-hand basins with properly trapped waste discharge pipes to external gully have been provided, together with an adequate hot water supply.

In the case of old established businesses, where these facilities do not at present exist, an effort is being made to have them brought up to the standard required.

Shops and Offices within the Borough.

SUMMARY.

Cinemas	11
Coal Dealers	60
General Dealers	373
Drapers, Clothiers, Outfitters	225
Grocers	172
Fruiterers, Florists, Game-dealers	80
Bakers and Confectioners	95
Newsagents, Tobacconists, Confectioners, Libraries, Stationers	204
Chemists, Herbalists, Drug Stores	45
Boot and Shoe Retailers and/or Repairers	104
Ironmongers, Plumbers, Hardware	72
Hairdressers	139
Fish Friers	117
Fishmongers	41
Butchers	142
Jewellers, Opticians, Watch Repairers	28
Dairies and Farm Produce	18
Radio, Cycle and Electrical Dealers, Motor Cycles	134
Wholesale Dealers	94
Furniture Dealers and Brokers	47
Cafes, Snack Bars, Ice Cream Saloons, Hotels	56
Miscellaneous Trades	83
Total	2,340
Number of visits paid	2,356

Additional Sanitary and Washing Accommodation was provided in 5 instances:—

Offices	Nil.
Shops	5

Camping Sites.

There are no camping sites, as such, in Middlesbrough.

Verminous Premises.

Number of Inspections	..	..	..	349
Number of Premises defested by Corporation				120
Warning letters sent to tenants	..	..		126
Warning letters sent to owners	..	..		20
Reports to Medical Officer of Health	..	..		25
Reports to Housing Department	..	..		24
Other warning letters sent	..	..	..	18

Houses defested by Corporation.

Ants :—

Private Houses	..	..	..	32
Other Premises	..	..	..	..

Bed Bugs :—

Private Houses	..	..	..	55
Other Premises	..	..	..	2

Cockroaches :—

Private Houses	..	..	..	11
Other Premises	..	..	..	11

Crickets :—

Private Houses	..	..	..	..
Other Premises	..	..	..	1

Fleas :—

Private Houses	..	..	..	4
Other Premises	..	..	..	1

Flies :—

Private Houses	..	..	..	1
Other Premises	..	..	..	2

The 32 houses treated for the eradication of ants had been infested for over 30 years. Early in the year the houses were sprayed with "Gammexane" spray L.044. For six months after treatment the tenants reported that the treatment had been entirely satisfactory and were unanimous in saying that this was the first effective step that had been taken to rid their houses of this pest.

With the lighting of winter fires a few ants did appear in the neighbourhood of the fireplaces. The premises were again treated, and no further complaints were received.

The work of defesting Corporation Houses found to be verminous is now carried out by the Housing Department's staff.

Factories Act, 1937.

There are 537 Factories on the Register, as follows :—

	With Mechanical Power.	Without Mechanical Power.
Bakehouses	40	12
Joiners and Undertakers.. ..	43	6
Printers	15	2
Motor Engineering	58	4
Boot Repairs	27	—
Tailoring, etc.	17	4
Mantle Alterations, etc. ..	8	17
Upholstery	9	6
Cabinet Makers	7	3
General Engineering	42	9
Electrical Engineering	13	2
Sugar Boiling	3	3
Laundries	9	—
Monumental Masons	3	1
Miscellaneous	140	34
Totals	434	103

Number of Inspections (including works of
Building and Engineering Construction) .. 325

On the whole, the Factories and other premises were found to be in a satisfactory condition and no legal proceedings were instituted.

The following is a summary of the work carried out during the year :—

**NOTICES RECEIVED FROM HIS MAJESTY'S INSPECTOR OF
FACTORIES :—**

Removed from Register	31
Change of Business	25
New Premises	40
Sanitary Defects etc.	6

NOTICES SERVED UNDER THE ACT :—

To cleanse, redecorate, etc.	15
Sanitary defects	26
To provide refuse receptacles	1
To provide adequate lighting	—
Miscellaneous	1
Number of Fire Certificates issued	12

SANITARY CONVENIENCES IN FACTORIES :—

Insufficient	..	..	..	..	..	5
Unsuitable or defective	..	..	..	..	..	8
Non-separation of Sexes	..	..	..	..	..	—

HOME WORK (SECTIONS 110 & 111) :—

16 Lists of Out-workers (or Home-workers) were received in the first half of the year and 14 for the second half.

Number of Lists of Out-workers received	..	30
Number of Employers	.. .. .	16
Number of Out-workers premises inspected		—
Number of Out-workers—1st half of year		49
Number of Out-workers—2nd half of year		40

RESTAURANTS, KITCHENS, ETC. :—

Number on Register	..	..	..	54
Number Inspected	..	..	..	54
Number of Inspections	..	..	..	72

Rag Flock Regulations 1912.

16 samples were taken under the Regulations during the year. The Public Analyst reported that all these samples conformed to the standard of cleanliness specified in the Rag Flock Regulations 1912.

Fertilisers and Feeding Stuffs Act, 1926.

One sample was procured at the request of another Authority and proved satisfactory.

Pharmacy and Poisons Act, 1933.**Poisons Rules, 1935.**

128 premises with the persons nominated to sell poisons under the above rules are now registered—an increase of 81 during the year.

The increase is due to one wholesale firm selling disinfectant to general shops.

Upon registration, each person nominated was informed by letter of the need for separation of the commodity from foodstuffs, and where this was impossible, to store same upon the floor of the shop.

An inspection was made at each of the premises during the year.

Public Mortuary.

The Public Mortuary is situated at the Borough Engineer's yard in Commercial Street.

Satisfactory arrangements exist for the supervision and cleaning of the Mortuary, which however from a structural point of view is far from satisfactory.

When the time is opportune, a modern building centrally situated with adequate provision for postmortems and with appropriate ancillary facilities should be provided.

During the year, 74 bodies were removed to the Mortuary.

SECTION D.

HOUSING.

Number of new houses erected in the Borough during the year :—

1. Erected by the Local Authority	..	344
2. Erected by Other Persons	..	69
3. Houses Demolished	..	5

Number of new houses erected in the Borough during the year :—

The Ward distribution of the new houses referred to is as follows :—

Linthorpe Ward	..	30
Ormesby Ward	..	2
Ayresome Ward	..	187
Grove Hill Ward	..	194
Total	..	413

Housing Statistics :—

1. Inspection of dwelling houses during the year :—
 - 1.(a) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts) 9,976
 - (b) Number of inspections made for the purpose .. 20,250
 - 2.(a) Number of dwelling houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 and 1932 985
 - (b) Number of inspections made for the purpose .. 1,001
 3. Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation 981
 4. Number of dwelling houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation 8,969
2. Remedy of defects during the year without service of formal notices :—

Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority or their officers 3,249

3. Action under Statutory Powers during the year :—

(a) Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936 :—

(1) Number of dwelling houses in respect of which notices were served requiring repairs	4
(2) Number of dwelling houses which were rendered fit after service of formal notices :—	
(a) By owners	1
(b) By Local Authority in default of owners	—

(b) Proceedings under Public Health Acts :—

(1) Number of dwelling houses in respect of which notices were served requiring defects to be remedied	1,896
(2) Number of dwelling houses in which defects were remedied after service of formal notices :—	
(a) By owners	1,442
(b) By Local Authority in default of owners	—

(c) Proceedings under Sections 11 and 13 of the Housing Act, 1936 :—

(1) Number of dwelling houses in respect of which Demolition Orders were made ..	—
(2) Number of dwelling houses demolished in pursuance of Demolition Orders ..	—

(d) Proceedings under Section 12 of the Housing Act, 1936 :—

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made (Underground room) ..	1
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	—

4. Housing Act, 1936—Part IV—Overcrowding :—

(a) (i) Number of dwellings overcrowded at the end of the year	—
(ii) Number of families dwelling therein ..	—
(iii) Number of persons dwelling therein ..	—

(b)	Number of new cases of overcrowding reported during the year	—
(c)	(i) Number of cases of overcrowding relieved during the year	—
	(ii) Number of persons concerned in such cases	—
(d)	Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding	—
(e)	Any other particulars with respect to overcrowding conditions upon which the Medical Officer of Health may consider it desirable to report	—

Without carrying out a complete survey, it is impossible to complete statistics of overcrowding. The Housing Department have a complete list of applicants who are overcrowded, and to carry out a census would be wasted effort, owing to the fact that as new houses are being built, overcrowded persons are being re-housed under a points system and any census taken would be altered from day to day.

Overcrowding.

During the year, 16 visits were made to houses known to be overcrowded.

Rent and Mortgage Interest Restrictions (Amendment) Act, 1933.

During the year 9 certificates of disrepair were issued by the Town Clerk's Department.

Houses Let-in-Lodgings.

Number of Houses	46
Number of Inspections	52
Number registered during year	3
Number discontinued during year	11
Number of Notices and Letters re repairs, cleanliness, etc.	8

Circular letters respecting the necessary cleansing are forwarded annually to the responsible occupiers of all houses.

Common Lodging Houses.

Number of Houses	4
Number of Keepers	4
Number of Inspections	30
Number of Lodgers accommodated nightly	219
Number registered during the year ..	1
Number closed or discontinued	1
Number of Notices and Letters re repairs, cleanliness, etc.	9

Squatters Camps.

During August 1946, two Anti-Aircraft Sites were occupied by squatters, comprising 78 families (76 Males, 78 Females and 82 Children).

Weekly inspections were made to ensure that the hutments and sanitary accommodation were kept in satisfactory condition.

No difficulties were experienced, and the squatters conducted themselves in a satisfactory manner.

Number of Inspections .. 18

SECTION E.

INSPECTION AND SUPERVISION OF FOOD.

The Chief Sanitary Inspector is mainly responsible for this Section.

Bacteriological Examination of Milk.

247 samples were procured during the year and submitted for examination. 149 or 60.3% were found to be clean and 98 or 39.7% dirty.

Total number of samples taken during the year 247

Ordinary Milks	..	..	..	4
Graded Milks	..	..	..	243

SUMMARY :

		Clean.	Dirty.	Total.
		<hr/>	<hr/>	<hr/>
Ordinary Milks	..	2	2	4
Graded Milks	..	147	96	243
		<hr/>	<hr/>	<hr/>
Totals	..	149	98	247

SAMPLES WERE FOUND TO BE CLEAN AS FOLLOWS :—

On 1st Test	..	..	..	..	117
On 2nd Test	..	..	..	..	17
On subsequent Tests	..	..	..	..	15
					<hr/>
					149

Graded Milks.

SUMMARY :

		Clean.	Dirty.	Total.
		<hr/>	<hr/>	<hr/>
Tuberculin Tested	..	61	33	94
Tuberculin Tested	..			
(Certified)	..	41	12	53
Accredited	.. ..	45	51	96
Ungraded	.. ..	2	2	4
		<hr/>	<hr/>	<hr/>
Totals	.. ..	149	98	247

	No. of Producers.	No. of Samples.	No. Clean.	No. Dirty.
Inside the Borough ..	5	35	30	5
Outside the Borough ..	30	208	117	91
Total ..	35	243	147	96

Of the number of Graded Milks dirty, 91 samples were from outside the Borough, having been procured from 28 producers. Notification of the results, was given to the County Health Inspector, who procured samples at the farms. These latter samples were all reported as satisfactory.

All churns within the Borough are steam treated before return to the farms. As a rule, farmers do not again treat the churns, and there is thus a likelihood of contamination occurring between the time of treatment and churn filling at the farm. A. M. and P. M. Milkings are often mixed, and this may also result in unsatisfactory samples.

Pasteurised Milks.

	Number submitted	Number satisfactory	Number un-satisfactory
Bacteriological Test ..	70	59	11

1 unsatisfactory on account of insufficient pasteurisation.

10 unsatisfactory on account of—failed Methylene Blue test within specified periods.

Biological Examination of Milk.

Number of samples submitted.	Number free from Tubercle Bacilli.	Number containing Tubercle Bacilli.
123	121	2

The following table shews the number of samples submitted for Biological Examination which were returned as "Positive" for Tubercle Bacilli during the past five years:—

1943	..	..	..	..	4
1944	..	..	..	..	4
1945	..	..	..	..	1
1946	..	..	..	..	2
1947	..	..	..	..	2

Milk (Special Designations) Order, 1936-1938.	1946	1947
	—	—
Number of Producer's Licences granted for Accredited Milk	5	4
Number of Dealer's Licences granted for Accredited Milk	—	—
Number of Supplementary Licences granted for Accredited Milk	1	—
Number of Pasteuriser's Licences granted	3	3
Number of Dealer's Licences granted for Pasteurised Milk	2	4
Number of Dealer's Bottling Licences granted for Tuberculin Tested (Pasteurised) Milk.	—	1
Number of Bottler's Licences granted for Pasteurised Milk.	—	1
Number of Producer's Licences granted for Tuberculin Tested (Certified) Milk ..	2	—
Number of Dealer's Licences granted for Tuberculin Tested (Certified) Milk ..	—	—
Number of Producer's Licences granted for Tuberculin Tested Milk	—	2
Number of Dealer's Licences granted for Tuberculin Tested Milk	5	7
Number of Bottler's Licences granted for Tuberculin Tested Milk	2	1
	—	—
	20	23

Purveyors of Milk.

(a) SHOPS FROM WHICH LOOSE MILK IS SOLD :—

	1946	1947
	—	—
(1) Where Dairy Produce only is sold ..	7	5
(2) Confectionery and milk	14	6
(3) General shops	7	1
(4) Dwelling houses without rounds ..	—	—
(5) Dwelling houses with rounds ..	3	—
(6) Sale of milk on rounds only ..	4	—
	—	—
	35	12

(b) BOTTLED MILK :

				1946	1947
				—	—
(1) Accredited Milk	..	..	..	—	—
(2) Pasteurised Milk	..	..	..	27	63
(3) Tuberculin Tested Milk	..	..	..	7	8
(4) Loose Milk	..	..	..	35	12
				—	—
				69	83

The following table shews the average fatty content of the samples procured during the last five years :—

Year.	Number of samples taken.	Average Fat content.
—	—	—
1943	20	3.69%
1944	36	3.36%
1945	17	3.72%
1946	41	3.59%
1947	89	3.37%

With the exception of three small dairies, the whole of the milk for the Borough is supplied by three large dairies, with the result that the milk is "Mixed," thus shewing a high average fat content.

Ice Cream Dealers.

Sections 272, 273 and 274 of the Middlesbrough Corporation Act, 1933, make it compulsory for all manufacturers of ice cream to be registered with the Local Authority.

Number on Register	..	..	163
Number of Visits	..	..	95

The results of the analyses were forwarded to manufacturers and the meaning of the terms used was explained. Prior to "Follow-up" samples being procured, interviews with manufacturers and visits to premises were made, including an enquiry into methods and inspection of equipment. As a result, a considerable improvement was obtained, as a glance at the above table will prove.

All persons retailing and/or manufacturing Ice-cream were requested to submit themselves voluntarily to the "Widal" etc. tests for typhoid fever infection. It is pleasing to record that 95% responded, and all proved negative.

ICE CREAM SAMPLES—TAKEN 23.7.47 to 23.10.47.

TABLE 1—RESULTS OF “COLD-MIX” SAMPLES.

Time taken to reduce Methylene Blue. (Hours).	Coliform Organisms (Not Present)	Coliform Organisms (Present) Tubes.			Number of Specimens with Plate Count. (Thousands per ml.)				Grading			
		1	2	3	0—10	101—100	101—1000	1000—	1	2	3	4
4½	..	..	..	..	..	..	..	..	..	..	..	..
4—2½	..	..	..	2	..	..	..	2	..	2	..	..
2—0	1	..	..	5	1	2	1	2	..	..	..	..
RESULTS OF “FOLLOW-UP” SAMPLES OF THOSE REPORTED AS GRADE 4.												
4½	..	..	..	..	..	..	..	..	..	..	..	..
4—2½	1	1	..	..	..	..	1	..	..	1	..	..
2—0	2	..	1	1	..	..	1	1	..	..	..	2

TABLE 2—RESULTS OF “HOT-MIX” SAMPLES.

4½	1	1	1	..	..	1	..	..	1	..	..	..
4—2½	6	1	1	1	2	..	4	2	..	6	..	..
2—0	23	3	2	14	1	4	11	7	..	..	7	16
RESULTS OF “FOLLOW-UP” SAMPLES OF THOSE ABOVE REPORTED AS GRADES 3 and 4.												
4½	8	1	..	1	2	5	1	1	8	..	..	..
4—2½	4	..	..	2	..	1	2	2	..	4	..	..
2—0	16	2	1	6	1	2	6	7	..	..	6	10
69	23	8	5	33	6	18	25	20	9	13	16	31

Cowsheds.

Number of Cowsheds	10
Number of Registered Cowkeepers	10
Number of Cows kept	270
Number of inspections made	14
Number of Notices to Limewash	—

Dairies and Milkshops.

	Inside the Borough.	Outside the Borough.
Number on Register	21	—
Number discontinued since January, 1947	2	—
Number registered since January, 1947	—	—
Number of Licences transferred	—	—
Number of Inspections	22	—
Number of letters sent re minor contraventions, alterations to premises, etc.	7	—

Meat and Other Foods.**SLAUGHTER OF ANIMALS ACT, 1933.**

There are now 71 persons on the Register of Licensed Slaughtermen.

Slaughterhouses.

	Registered.	Licensed.
December, 1920	39	3
January, 1947	23	2
December, 1947	23	2
Public Slaughterhouses	1	—
Number of Inspections (At two Slaughterhouses—see Public Health (Meat) Regulations.) ..	1,352	—
Number of Notices to Limewash ..	—	—
Number of Notices to provide refuse receptacles	—	—
Number of notifications of change of occupier	—	—
Letters re Cleanliness, Repairs, etc. ..	—	—

Manufacture of Foodstuffs.

Sections 291 and 293 of the Middlesbrough Corporation Act, 1933, make it compulsory for all premises used or proposed to be used for the preparation of Potted, Pressed, Pickled or Preserved Meat (including Sausages), to be registered with the Local Authority.

The total number of such premises on the register is 122.

Public Health (Meat) Regulations, 1924.

The Ministry of Food took over the slaughtering and allocation of all animals slaughtered, on the 15th January, 1940.

The Public Abattoir and the Co-operative Society's Abattoir in Saltwells Road are used; a qualified Inspector is employed upon inspection at each of these premises.

The following have been slaughtered and inspected before removal from the slaughterhouses :—

Species				Public Abattoir	Saltwells Road Abattoir
Bulls	..	..	..	178	108
Bullocks	..	..	..	2,430	1,175
Cows	..	..	..	1,480	1,247
Heifers	..	..	..	2,372	1,231
Calves	..	..	..	5,907	3,592
Sheep	..	..	..	19,541	11,787
Pigs	..	..	..	310	181
				32,218	19,321

Carcases Inspected and Condemned.

	Cattle excluding			Sheep and		Pigs
	Cows	Cows	Calves	Lambs		
Number killed ..	7,494	2,727	9,499	31,328		491
Number inspected ..	7,494	2,727	9,499	31,328		491
ALL DISEASES EXCEPT TUBERCULOSIS :						
Whole carcasses condemned ..	11	17	14	18		4
Carcases of which some part or organ was condemned ..	3,984	806	63	1,816		7
Percentage of the number inspected affected with disease other than tuberculosis ..	53.31	30.18	0.81	5.85		2.24
TUBERCULOSIS ONLY :						
Whole carcasses condemned ..	13	150	3	—		4
Carcases of which some part or organ was condemned	361	1,463	12	—		3
Percentage of the number inspected affected with tuberculosis ..	4.99	59.15	0.16	—		1.42

Of the 51,539 animals slaughtered, 42,790 or 83.024% were found to be sound and unaffected by disease of any nature; 2,009 or 3.898% were found to be affected with tuberculosis and 6,740 or 13.077% were found to be affected with other diseased or conditions.

**Particulars of Surrenders and Seizures of Unsound
Animals and Meat :—**

Year.	Number of Voluntary Surrenders of diseased carcasses or part carcasses or internal organs by :		Number of Seizures (with subsequent destruction) of diseased carcasses or part carcasses or internal organs		Totals
	Tuberculosis	Other Conditions	Tuberculosis	Other Conditions	
1943	1,051	5,452	—	—	6,503
1944	1,045	6,854	—	—	7,899
1945	1,179	6,495	—	—	7,674
1946	1,409	6,236	—	—	7,645
1947	2,009	6,740	—	—	8,749

Year	Whole carcasses affected	Part carcasses affected	Organs only affected
1943	209	54	6,240
1944	269	63	7,567
1945	275	33	7,366
1946	274	124	7,247
1947	234	237	8,278

Below is a list of Foodstuffs found to be unsound and unfit for human consumption. All were surrendered and destroyed :—

	Number	Stones	Lbs.
Beasts	191	5,871	5
Pigs	8	91	8
Sheep and Lambs	18	50	10
Calves	17	44	11
Beef		2,263	2 $\frac{1}{4}$
Pork		18	5 $\frac{1}{2}$
Mutton		279	2 $\frac{3}{4}$
Veal		2	11
Offal		6,126	10 $\frac{1}{2}$
Fish		780	0 $\frac{1}{2}$
Rabbits		6	10
Canned Foods (Fish, Meat, Fruit, Milk, etc.)		695	11 $\frac{3}{4}$
Vegetables		271	6 $\frac{1}{2}$
Miscellaneous.. ..		1,028	0
Total		17,530	10 $\frac{3}{4}$

The total weight of butchers' meat and other foodstuffs surrendered during the year amounted to 17,530 stones 10 $\frac{3}{4}$ lbs. as compared with 16,297 stones 3 lbs. in 1946 and 15,193 stones 5 lbs. in 1945.

Of the 14,748 stones 10 lbs. of butchers' meat condemned, 8,657 stones 12 lbs. were affected with tuberculosis.

During 1946, 612 stones of imported Beef and Mutton were surrendered as unfit for human consumption. During 1947, 2,542 stones were surrendered. This abnormal increase can be accounted for by the hot dry summer experienced, and the delay in transport by rail. In one case, one unventilated truck containing mutton was delayed for five days; practically the whole consignment was unusable.

During the past five years, the incidence of tuberculosis in animals slaughtered for human consumption was as follows:—

Year.	Number of Animals Slaughtered.	Number.	Percentage.
1943	64,683	1,051	1.624
1944	51,359	1,045	2.035
1945	60,504	1,179	1.948
1946	67,493	1,409	2.087
1947	51,539	2,009	3.898

Adulteration.

Public Health (Preservatives, etc., in Food) Regulations, 1925-9.

During the year, 188 samples were analysed for the presence of preservatives, all being declared genuine.

Informal or Test Samples.

405 informal and 88 formal samples were taken as below, during the year, all of which were submitted to the Public Analyst for analysis.

				Informal.	Formal.
				<hr/>	<hr/>
Bacon	..	..	..	38	..
Baking Powder	..	..	..	5	..
Butter	..	..	..	48	..
Cheese	..	..	..	43	..
Cocoa	..	..	..	4	..
Golden Raising Powder	..	..	..	1	..
Ham	..	..	..	2	..
Jam	..	..	..	47	..
Lard	..	..	..	13	..
Lard (Compound)	..	..	..	35	..
Margarine	..	..	..	48	..
Marmalade	..	..	..	1	..
Meat Paste	..	..	..	1	..
Milk	..	..	..	1	88
Milk (Dried)	..	..	..	3	..
Mixed Spice	..	..	..	4	..
Mustard	..	..	..	4	..
Pickles	..	..	..	1	..
Sauce	..	..	..	11	..
Sugar	..	..	..	47	..
Tea	..	..	..	48	..
				<hr/>	<hr/>
				405	88
				<hr/>	<hr/>
Total	..	..	..	493	

473 samples were returned Genuine, and 20 samples Not Genuine. (See Magisterial Proceedings).

Margarine.

Number of Manufacturers	..	..	—
Number of Wholesale Dealers	..	..	24
Number of Premises Registered	..	..	24

Butter.

There are three factories registered for making butter.

Magisterial Proceedings.

Number of Case.	Complaint.	Result.
1.	Contravening Food and Drugs Act 1938, Section 13.	Fined 20/- on each of two charges.
2.	do.	Fined £5 0s. 0d. on each of two charges, plus continuing penalty of £2 10s. 0d. per day on each charge.
3.	Contravening Food and Drugs Act 1938, Section 24. Selling milk containing 10.8% Extraneous Water.	Fined £10 0s. 0d. and £5 5s. 0d. Costs.
4.	Contravening Food and Drugs Act 1938, Section 3. "Selling Milk 12.0% and 12.6% Deficient in Milk Fat."	Fined £3 0s. 0d. on each (2) charge and Costs £4 4s. 0d.
5.	Contravening Food and Drugs Act 1938, Section 24. "Selling milk containing Extraneous Water, not less than 11.5%, 10.1%, 10.5%, and 2.8%."	Fined £5 0s. 0d. on each (3) charge, £2 0s. 0d. on a further charge, plus Costs £8 8s. 0d.
6.	Contravening Food and Drugs Act 1938, Section 24. "Selling milk containing Extraneous Water, not less than 21.7%, 24.0%, 21.4% and 16.1%."	Fined £6 0s. 0d. on each (4) charge, and Costs £6 6s. 0d.
7.	Failing to comply with "Cleansing Order under P.H. Act, 1935, Section 83."	Adjourned "Sine die."

PUBLIC BATHS.

I am obliged to Mr. Sidney Fisher, the Baths Superintendent, for the following information :—

Attendances during the year 1947.**Central Baths.**

First Class Swimming Bath	..	..	109,893
Second Class Swimming Bath	..	..	24,217
Total			134,110
Gents' Slipper Baths	..	..	40,878
Ladies' Slipper Baths	..	..	8,296
Total			49,174
Turkish Baths	..	..	1,939
Russian Baths	..	..	1,716
Radiant Heat Baths	..	..	467
Brine Foam Baths	..	..	228
Total			4,350

Cannon Street Baths.

Gents' Slipper Baths	..	..	14,504
Ladies' Slipper Baths	..	..	3,499
Total			18,003

Daere Street Baths :—

Gents' Slipper Baths	..	..	10,868
Ladies' Slipper Baths	..	..	6,118
Total			16,986

Schoolchildren :—	Total	..	20,387
Youth Organisations :—	Total	..	6,894

Grand Total 249,904

The increase in the attendances at the Central Baths continued and 1947 might have proved a record year, but for the fact that the Baths were temporarily closed during the Infantile Paralysis epidemic.

There was a great demand for slipper baths, no doubt due to the acute shortage of coal, towels and soap, but even so, the time has come when many more slipper baths should be provided for the public.

The Zoto-Foam and brine baths were well patronised, also the Turkish and Russian baths, proving beneficial to many sufferers from rheumatic complaints.

The filtration and chlorinating plants functioned well, but it is hoped to have a new chlorinating plant installed in the filter house during the early part of next year; the present plant having been in operation for 15 years.

SECTION F.

PREVALENCE OF AND CONTROL OVER
INFECTIOUS AND OTHER DISEASES.

The total number of notifications received during the year was 5,020 compared with 3,697 in the previous year.

Diphtheria.

The cases notified numbered 41 against 52 in the previous year: there were no deaths.

Scarlet Fever.

There was an increase in the cases notified. 522 notifications were received as against 362 for the year 1946. The individual cases, however, continued to be of a mild type. There were no deaths.

Enteric Fever.

There was no evidence of this disease.

Cerebrospinal Fever.

Notifications of Cerebro Spinal Fever increased from 20 cases in 1946 to 23 in 1947. There were 4 deaths.

Erysipelas.

There were 33 notified cases.

Puerperal Pyrexia.

Sixty-one cases were notified.

Paratyphoid Fever.

There was no evidence of this disease.

Dysentery.

Notifications of Bacillary Dysentery numbered 4, as against 9 for the year 1946.

Measles.

During the year, 2,755 notifications were received as compared with 931 for the year 1946. There were 6 deaths. All cases were visited and kept under observation by Health Department Nurses.

Chickenpox.

679 notifications were received of whom 391 occurred in school children. All cases were visited by Health Department Nurses.

Whooping Cough.

There were 326 cases notified during the year with one death as compared with 514 cases and one death in 1946. All cases were visited by Health Department Nurses.

Ophthalmia Neonatorum.

Seven cases were notified, all of which recovered with unimpaired vision.

Influenza.

There were 18 deaths from this disease as compared with 17 in the previous year.

Influenzal Pneumonia.

Three cases were notified.

Acute Primary Pneumonia.

There were 163 cases notified, and there were 44 deaths

Smallpox.

No case occurred during the year.

Anterior Poliomyelitis.

There were 14 cases of this disease during the year, none of which was fatal. The first case appeared in May and the last one in October with maximum incidence in August and September.

The cases were scattered with the majority occurring in the western half of the town.

The ages varied from nine months to 20 years, five cases being under five years, seven cases age group 5—14 years, and two cases age group 15—24 years.

All cases were treated at West Lane Hospital where full facilities exist, including two iron lungs.

Special precautions taken included the showing of the Ministry of Health film to all doctors and nurses, the closing of Saturday morning matinees for children and the stopping of organised bathing facilities and of special Saturday morning swimming sessions for school-children.

Gastro-Enteritis.

There was a high incidence of Gastro-Enteritis during the year ; 57 deaths were notified, which compares with 13 in 1946 and 52 in 1945.

A high incidence was evident throughout the country and may be attributed to the hot, dry summer with its increased liability to the dust contamination of food and drink.

Vaccination Returns.

	1946.	1947.
Number of Births Notified	3,392	3,606
Successfully Vaccinated	1,036	1,188
Died Unvaccinated	188	226
Insusceptible to Vaccination	7	9
Declaration of Conscientious Objection	1,559	1,796
Postponed, whereabouts unknown, or removed	447	288
Percentage Successfully Vaccinated ..	30.53	32.94
Had Smallpox	—	—

DIPHTHERIA IMMUNISATION.

The work of Diphtheria Immunisation carried out by the Public Health Department in the year 1947, is shown by the following figures :—

No. of children under 5 years of age immunised	1,756
No. of schoolchildren immunised	381
No. of reinforcing injections	2,355

The following are the percentages of the total number of children in the town who have been immunised in the two groups :—

Percentage of children under 5 years of age immunised	49.08 %
Percentage of schoolchildren immunised ..	75.03 %

A reasonably high level of immunisation has therefore been maintained during the year.

This fact is reflected in the comparatively few cases of diphtheria notified in the town during the year, which numbered 41 and there being only one death due to diphtheria in 1947.

It is necessary to press ahead however, to secure if possible, that every child is immunised against diphtheria as soon as possible after the age of 8 months. It is only when at least 75% of all children in the town are immunised that we can be certain of a marked reduction in the incidence of diphtheria.

Full use of publicity material has been made during the year to advertise the efficiency of Diphtheria Immunisation and the facilities available locally. Free facilities exist at schools, school clinics and infant welfare centres for the carrying out of this work.

WEST LANE HOSPITAL.

This hospital provides 189 beds for infectious diseases and 36 beds for adult female Pulmonary Tuberculosis.

Whilst no major changes took place at the hospital during the year the hospital was extremely busy and coped with an increased number of cases compared with 1946. The hospital admits infectious diseases not only from Middlesbrough, but from Thornaby and wide areas of the North Riding and is always ready to accommodate special cases from other Authorities who do not possess the necessary facilities. Many Service patients have been admitted from as far as Catterick and Barnard Castle.

50% of the admissions during the year were due to Scarlet Fever which was, however, of a mild type and the most serious infection that the hospital had to deal with was that of Gastro-Enteritis in young babies and of this, the death rate, although high, compares more than favourably with other areas of the country.

The standard of work at the hospital has remained at a very high level and reflects great credit on the Matron and nursing staff. Matron, Mrs. B. Gardner, will be due for retirement in 1948 and she will be greatly missed from this hospital which she has served so faithfully for the past 25 years.

During the year, 8 nurses were presented for the Final Fever Certificate and 8 for the Preliminary Certificate of the General Nursing Council. All the candidates were successful and thus maintained the 100% pass which has been a feature of the past few years.

This fact reflects great credit on the Sister Tutor who has been largely responsible for the training of the nurses and on the Medical staff who have undertaken lectures.

The following table indicates the admissions, discharges and deaths in the isolation part of the hospital during the year for the various diseases ; all figures relating to actual diagnosis as established at the hospital. (The admissions etc. to the sanatorium section are reported under the section dealing with tuberculosis).

		Remaining 31/12/46.	Admitted. 1947.	Discharged. 1947.	Died. 1947.	Remaining 31/12/47.
Diphtheria	..	9	57	56	2	8
Scarlet Fever	..	31	610	616	..	25
Tonsillitis ..	..	2	75	76	..	1
Dysentery	..	..	5	3	1	1
Non-Specific						
Enteritis	..	1	118	77	39	3
Cerebro Spinal						
Meningitis	..	..	21	17	3	1
Tuberculous						
Meningitis	..	..	3	..	3	..
Lymphocytic						
Meningitis	..	..	2	2	..	..
Streptococcal						
Meningitis	..	..	3	2	1	..
Pneumococcal						
Meningitis	..	..	2	1	1	..
Puerperal Pyrexia		1	35	34	..	2
Ophthalmia						
Neonatorum	..	1	6	6	1	..
Pemphigus	..	..	6	5	1	..
Poliomyelitis	..	..	16	16	..	..
Polio-encephalitis	..	..	2	..	2	..
Erysipelas ..	..	..	11	10	1	..
Pneumonia (Lobar)		1	4	4	1	..
Broncho Pneumonia	..	..	6	3	3	..
Measles ..	..	8	70	75	2	1
German Measles	..	..	13	13	..	..
Whooping Cough	..	..	13	11	1	1
Chickenpox	..	..	6	6	..	..
Mumps ..	..	..	3	3	..	..
Miscellaneous	..	2	120	112	2	8
		56	1,207	1,148	64	51

Analysis of Diphtheria Cases.

Immunised ..	6	19	21	..	4
Non Immunised ..	3	38	35	2	4
	9	57	56	2	8

Diphtheria.

There were 57 cases of Diphtheria admitted during the year, two of whom died. Both these fatal cases occurred in unimmunised children under six years of age. The majority of the cases were infected with the Gravis type of organism. The complication rate in the remaining patients was very low.

Scarlet Fever.

There were 610 cases admitted during the year, with no deaths as compared with 463 cases and no deaths in 1946. The cases continued of a mild type with a low complication rate. The septic complications which did occur (ear, glands, sinuses etc.) responded most satisfactorily to modern chemo-therapy.

Enteritis.

There were 118 cases of non-specific enteritis admitted during the year, with 39 deaths as compared with 64 cases and six deaths in 1946. The majority of cases were under two years of age and all the deaths with two exceptions occurred in children under one year. In most of the fatal cases, no causative bacterial agent could be isolated and no response was obtained to treatments.

Cerebro-Spinal Fever.

Twenty-one cases in all occurred throughout the year, with 3 deaths as compared with 18 cases and 2 deaths in 1946. The infection is always of a serious nature. One patient was referred to the neurosurgical unit at Newcastle on account of a residual defect. The remainder recovered completely.

Tuberculous Meningitis.

Three cases occurred, all fatal, the same number as in 1946.

Acute Anterior Poliomyelitis.

Sixteen cases in all were treated in the hospital between May and October. The majority of cases were of a less severe variety, and the speed of recovery of muscle power was in many cases beyond expectation. Three patients were transferred to other hospitals for further treatment, whereas the remainder were discharged home under the care of an orthopaedic surgeon, if not completely recovered, for continued out-patient treatment and supervision.

Puerperal Pyrexia.

Thirty-five cases were admitted with no deaths, as compared with 33 cases and no deaths in 1946. The majority of these were of a mild nature, responding well to modern treatment, and causing no anxiety so far as life was concerned.

Ophthalmia Neonatorum.

Six cases were admitted during the year. In most instances the ophthalmia cleared up rapidly with sulpha or Penicillin treatment. One infant died from an inter-current infection.

Pemphigus Neonatorum.

Six cases were admitted during the year. The skin lesions responded readily to modern chemo-therapy. One infant died from an inter-current infection.

Measles.

Seventy cases were admitted with 2 deaths, as compared with 44 cases and 2 deaths in 1946. The majority of the 70 cases were admitted on account of the development of Broncho-pneumonia.

Whooping Cough.

Thirteen cases were admitted during the year, with one death. Most of these were admitted on account of a complicating Broncho-pneumonia.

SCABIES.

The work at the Municipal Scabies Treatment Centre, housed in premises adjacent to the Public Baths, has been fully maintained during the year. Facilities exist for the treatment of adults as well as schoolchildren and infants.

**Attendances at the Middlesbrough Scabies Clinic for the
year ended December, 1947.**

ADULTS :—

Male	..	..	..	..	116
Female	..	..	..	..	142
					<hr/>
			Total	..	258

SCHOOL-CHILDREN :—

Male	..	..	..	..	141
Female	..	..	..	..	162
					<hr/>
			Total	..	303

UNDER SCHOOL AGE :—

Male	..	..	..	..	38
Female	..	..	..	..	35
					<hr/>
			Total	..	73
Total number of patients ..					634
Total number of treatments ..					2,134

TUBERCULOSIS.

I am indebted to Dr. M. Walton, Clinical Tuberculosis Officer, for the following report :—

Notifications.

There were 285 persons notified as new cases of tuberculosis during the year. This is an increase of 40 compared with the year 1946, i.e., an increase of approximately 15%.

The distribution of this number of cases is as follows :

Males 126. Females 97. Children under 15 years. 62

Deaths.

127 persons died from tuberculosis in Middlesbrough. This gives the rate of 90 per 100,000.

Of the 127 deaths, 82 were males and 45 were females. Pulmonary tuberculosis accounted for 120 of the deaths and 7 non-pulmonary. The age and sex distribution of the total deaths from tuberculosis is as follows for 1947.

Males :

Age group..	5	—10	—15	—25	—35	—45	—55	—65	65+	Total
No. of cases ..	1	1	1	7	9	18	23	18	4	82

Females :

Age group..	5	—10	—15	—25	—35	—45	—55	—65	65+	Total
No. of cases ..	5	1	..	15	9	8	4	2	1	45

Case Finding.

Chest Clinic :

Through the co-operation of the Medical Superintendent and the Consulting Radiologist at the General Hospital, a weekly session was opened in the out-patients' department on 30.1.47. The session is held on a Thursday at 1-30 p.m. and cases referred from the general practitioners are x-rayed, a detailed history taken and examined. At the same time, a wet film is available for scrutiny.

That this "chest clinic" is used more by the general practitioners than the Dispensary, is seen by comparing the number of cases seen during 1946 and 1947. During 1947, 1,300 new patients were seen at the Chest Clinic whereas in 1946, 689 cases were referred to the Dispensary for the first time. A clinic operating in a general hospital avoids the stigma unavoidably attached to the Tuberculosis Dispensary.

Contact Examination :

All "contacts" of cases of tuberculosis are reviewed. Irrespective of symptoms, those over the age of 5 years are x-rayed and those under 5 years are tuberculin tested and the positive reactors chest x-rayed.

During the year, 609 contacts were reviewed and 35 cases of tuberculosis discovered. The following table indicates the age and sex distribution of contacts.

Males.				Females.		
Age Group	No.	Abnormal Shadows	Notified Tuberculous	No.	Abnormal Shadows	Notified Tuberculous
0—1	..	..	..	3	..	..
1—2	9	..	..	9	1	1
2—3	6	..	..	15	3	2
3—4	8	3	1	14	2	1
4—5	22	3	3	14	1	5
5—10	45	5	2	90	21	..
10—15	38	5	3	74	4	1
15—25	30	3	1	47	2	1
25—35	25	3	1	56	9	8
35—45	14	2	2	52	9	..
45—55	10	2	1	19	3	1
55—65	2	1	1	7	1	..
Over 65	..	..	..	..	..	..

The figures for age group 5—10 and 10—15 in females includes a radiological survey of a girls' institution when two open cases of pulmonary tuberculosis were discovered.

A survey was commenced during the last five months of 1947 to ascertain the size of the problem of childhood tuberculosis in Middlesbrough and its relation to over-crowding.

Method of Investigation.

1. Age 0—5 years children contacts were tuberculin tested with Tuberculin Jelly (Allen & Hanbury) and the positive reactors chest x-rayed.

Definition.

Contact Child is one who is or has been in domestic relation to a case of tuberculosis.

Negative case contact is one who has been in contact with a case of tuberculosis from whom the tubercle bacillus has never been isolated.

Positive case contact is one who has been in contact with a case of tuberculosis excreting the tubercle bacillus.

Over-crowding :

Over-crowding exists when the case of tuberculosis has not separate sleeping accommodation.

Table 1.**Tuberculin Reactions of Total Tested.**

Positive Contacts.

Negative Contacts.

No.	Positive.	Percentage.	No.	Positive.	Percentage.
54	34	63%	36	8	22%

Table 2.**Age Distribution of Contacts.**

Positive Contacts.

Negative Contacts.

Age/yrs.	No.	+ve	%	Age/yrs.	No.	+ve.	%
0—1	1	..	..	0—1	2	..	..
1—2	14	6	43%	1—2	4	1	25%
2—3	17	9	53%	2—3	7	..	..
3—4	6	5	83%	3—4	9	2	22%
4—5	7	6	86%	4—5	5	1	25%

Table 3.

Relation of tuberculous infection to overcrowding in Positive contacts.

Overcrowded.

Not Overcrowded.

No.	Positive.	Percentage.	No.	Positive.	Percentage.
14	13	93%	36	8	25%

The Survey.

The figures are small but only five months work has been included.

They agree substantially with the results of many other surveys conducted over the country. In table 1 is shown the greatly increased risk of developing tuberculosis in a contact of an "open case" as opposed to a "closed case." In table 2 is shown the increasing percentage of positive reactors as the age scale is ascended until 3-4 age group 83% are already infected in contact with open cases, whereas the figures for the closed cases are never higher than 25%.

In table 3 is graphically illustrated the effect of over-crowding in the spread of tuberculosis. In over-crowded positive households, 93% of contact children develop tuberculous infection. In non-overcrowded positive households, 25%.

The Problem is twofold. A. Prevention.

B. Treatment.

A. Prevention of childhood tuberculosis depends on—

- (i) early diagnosis and isolation of positive cases ;
or (ii) removal of the child from the tuberculous household.;
or (iii) vaccination of tuberculin negative children with B.C.G.

All are ideals towards which we are moving, but none is capable of immediate introduction in Middlesbrough because—

- (i) the home factor—some patients refuse treatment and stay at home.
- (ii) parents refuse to allow children to be taken from them.
- (iii) B.C.G. has not been introduced as yet in this country.

B. Treatment.

In general, cases fall in two groups.

- (i) Symptomless Primary Complex—if home conditions are good and the cause of infection has been removed they are best kept at home under serial observation by x-ray.
- (ii) All other cases of clinical tuberculosis—treatment in a suitable institution, sanatorium or hospital is required.

In the five months, August—December 1947, there have been 36 cases of clinical tuberculosis in children under the age of fourteen years, distributed as follows:—

Age.	No. of Cases.
—	—
0—3 yrs.	9
3—6 „	9
6—9 „	7
9—12	4
Over 12	7

Beds available in Middlesbrough for children with tuberculosis include—

in the children's ward at Hemlington Hospital, any beds not occupied by bone tuberculosis, usually 3.
8 beds in Poole Sanatorium.

All clinical tuberculosis cases in childhood are long term cases being in hospital, on an average, one year. Those over the age of five years are in need of schooling and negotiations for a further ward at Hemlington are in progress at the time of this report.

For children under three years, i.e., cot babies, it is a question of isolation from their infective homes until the dangerous years of heavy mortality have passed.

The mortality in childhood bears a great deal on the age of infection.

Age in years at first infection.	Mortality (Wallgren).
0—1 yr.	35%
1—3 „	15%
3—7 „	4%
7—14 „	0.8%

In this short survey no mention has been made of infection by bovine bacilli in milk and many omissions in the pathogenesis of childhood tuberculosis have been made. However, if the need for further bed accommodation for childhood tuberculosis has been made apparant, then some reward has been given to the untiring efforts of the Health Visitors on whose work this survey was completed.

Mass Radiography.

During the year, the Unit allotted to Middlesbrough has been built up and hopes to start work in the early part of 1948.

A Medical Director, organising secretary and senior radiographer were appointed and in November they attended a course of instruction for one month at the Ministry of Health Unit in London.

The Unit is based at the General Hospital where suitable alterations to Block 17 are planned. It will eventually be mobile and extend its service outside the County Borough. The Unit is working as an integral part of the tuberculosis service, the Medical Director is also Assistant Tuberculosis Officer.

Dispensary Supervision.

Cases are reviewed from time to time at the Dispensary at 35 Grange Road. During the year an appointment system was introduced and each patient is given a time and date for his/her next appointment, thereby saving time spent in the waiting room. This arrangement is popular with the patients and also allows for a close check on attendance of "shy" attenders. There were approximately 3,000 attendances at the Dispensary during the year. Clinics are held on a Monday and Wednesday morning and also Monday evening for patients who are working.

The three Health Visitors made 6,800 visits to homes of cases during the year. 900 pathological specimens, mainly sputum and laryngeal swabs, were examined during the year.

The use of Calciferol in the treatment of lupus vulgaris has brought satisfactory results to many old standing cases who have suffered years of treatment by other methods.

Three cases have been referred for plastic surgery of the face following retrogression of the skin tuberculosis. Encouraging results have also been obtained with Calciferol in the treatment of tuberculous adenitis and epididymitis.

A. P. Clinics.

80 patients attend as out-patients for refills of pneumoperitoneum and pneumothorax. Through the courtesy of the Radiological Department at the General Hospital, facilities for screening and radiological control are afforded at twice weekly clinics held at the General Hospital on a Tuesday and Friday morning at 9 o'clock.

During the course of the year, 2,880 refills were given.

X-Ray Examination.

Including Chest Clinic radiographs and Dispensary surveillance radiographs, 2,402 films were taken during the year. Once again it is our privilege to pay high tribute to the consistently high standard of work and continued courteous co-operation of the radiological department at the General Hospital.

Occupational Therapy.

During the year a full time occupational therapist was appointed to work in the tuberculosis service and provide diversional occupational therapy for patients in sanatorium beds at the General Hospital, West Lane and Hemlington, as well as patients under supervision at home.

Leatherwork classes are held at Grange Road on two afternoons per week and are well attended by out-patients. Among the handicrafts available are embroidery, leatherwork, rug-making, weaving, feltwork, etc. The occupational therapist links up his department with the woodwork centre established in 1946 by the Care Committee in Meath Street.

Pulmonary Tuberculosis Patients dealt with under the Scheme of Allowances (266T), year ended 31st December, 1947.

Patients referred for investigation	..	..	..	163
<hr/>				
Current cases at 31.12.47 including				
21 brought forward from 1946	..	..	..	61
Discontinued (for reasons stated below)	..	..	..	69
Ineligible	..	..	..	33
				<hr/>
				163

Discontinued :—

Working or fit for work	..	..	..	..	22
Died	..	..	..	..	20
Not Tuberculous	..	..	..	..	5
Awarded Ministry Pension	..	..	..	..	5
Admitted Hospital and in receipt of sickness Benefit	..	..	..	..	7
Married	..	..	..	..	4
Self discharged from hospital	..	..	..	..	1
Compensation claim paid	..	..	..	..	1
Eligible for Old Age Pension	..	..	..	..	1
Eligible for sickness benefit	..	..	..	..	1
Refused allowance	..	..	..	..	1
Ex hospital	..	..	..	..	1
					<hr/>
					69

Nature of Allowances Granted.

Maintenance.	Discretionary.	Special.
56

The amount disbursed during the year ended 31.12.47, was.
£5,615 6s. 0d.

Institutional Treatment.**POOLE SANATORIUM.**

164 patients from Middlesbrough received treatment in this sanatorium during the year. This is an increase of 68 over the previous year. There has been a greater number of transfers between the beds in Middlesbrough and those at Poole, thus utilizing the advantages of the excellent thoracic surgery unit to the full. Pneumothorax patients who need adhesion section are transferred to Poole for this operation and when the treatment is satisfactorily established, returned to the Middlesbrough hospitals for continuation of in-patient treatment. In this way, the maximum benefit of Poole is extended to the maximum number of cases.

The index of such increase in treatment is seen in the figures given in the preceding paragraph for pneumothorax and pneumoperitoneum refills.

The Children's Block was opened on 6.5.47 and affords Middlesbrough 8 beds. These have been kept fully occupied and the children without exception, have done well. Full teaching facilities and occupational therapy are available for the children.

70 patients remained in the Sanatorium on 31.12.47.

WEST LANE SANATORIUM.

147 female patients were treated in the sanatorium during the year.

6 beds reserved for cases from Durham County were fully occupied for the year.

600 artificial pneumothorax refills were given : 39 phrenic nerve operations were performed.

GENERAL HOSPITAL SANATORIUM BLOCK.

277 male patients were treated during the year. 6 beds reserved for cases from North Riding of Yorkshire were fully occupied.

550 artificial pneumothorax refills were given : 26 phrenic nerve operations were performed.

HEMLINGTON HOSPITAL.

87 patients were treated in this hospital. Through arrangements with the Medical Superintendent, beds were made available for non-tuberculous chest conditions and "closed" tuberculous cases, e.g., pleurisy, bone and joint and gland patients. The children's ward has been of inestimable value particularly for the type of case such as "primary complex" and pleural effusion. The Consultant Orthopaedic Surgeon, Mr. Reid, supervises the treatment of the bone and joint cases and good results have been achieved.

29 cases remained in hospital on 31.12.47.

SHOTLEY BRIDGE THORACIC SURGERY CENTRE.

7 patients were transferred to Shotley Bridge Emergency Hospital for thoracic surgery. They included malignant lung, bronchiectasis, lung abscess and hydatid disease of the lung.

Conclusion.

Middlesbrough is particularly fortunate in that there are 170 beds available for the treatment of tuberculosis. Except for children, the average time between diagnosis and admission to hospital is rarely more than one month.

With the advent of the National Health Service scheme and the distribution of beds on a regional basis, the County Borough will probably suffer from curtailment of accommodation available.

At present, open cases diagnosed in the hospitals in the town are immediately transferred to tuberculosis wards, a feature appreciated by the general practitioners and surgeons.

The allocation of "extra points" in the distribution of houses to tuberculous families by the Housing Committee ensured the rehousing in more suitable surroundings of many of our patients. This scheme has much to commend it and in reducing the overcrowding, is directly diminishing the rate of infection in tuberculous households.

The propaganda leaflets issued by the National Association for the Prevention of Tuberculosis, form a useful adjunct to the more personal advice given by the Health Visitors. In particular, the leaflet dealing with the hygiene of the home is very valuable and is distributed to each patient.

VENEREAL DISEASES.

It will be seen from the figures in the appended tables that there was a decrease during the year in the number of new cases attending the Clinic, there being 1,204 for the year, as compared with 1,444 for 1946.

This decrease has shown itself both in Gonorrhoea and in Syphilis, the comparable figures being as follows :

Syphilis.				1946	1947
				—	—
Males	..	..	..	222	196
Females		..	..	82	61

Gonorrhoea.				1946	1947
				—	—
Males	..	..	..	286	284
Females		..	..	70	50

No staff changes took place during the year, the work being under the direction of Dr. A. Alun Williams to whom I am indebted for the compilation of the statistical part of this section.

It will be seen that the work of this department is still very extensive and much hard work is entailed in the treatment of patients, following up of contacts and in the detailed administrative work, including the completion of reports and returns to the Ministry of Health.

Institutional facilities continued for in-patient treatment at the General Hospital.

Propaganda as to the prevention of Venereal Diseases and the importance of early and adequate treatment has been continued by the use of posters, leaflets and other literature from the Central Council for Health Education. The staff of the Port Health Authority have co-operated in this propaganda amongst seamen.

Regulation 33B.

The cases brought to the notice of the department under these regulations were followed up to the greatest possible extent. The following figures show the work which was undertaken during the year in this connection :—

	Males	Females	Total
(1) (a) Total number of contacts in respect of whom Form I was received	11	11
(b) Number in (a) transferred from other areas	1	1

- (2) Number of cases in (1) in which attempts were made during the current period outside the scope of the Regulation to persuade the contact to be examined before the latter had been named on a second Form 1 :—

Contacts found	10	10
Contacts examined or already under treatment	8	8

- (3) (a) Number of those in (1) in respect of whom two or more Forms I were received

1	1
---	---

- (b) Number included in (3) (a) in respect of whom the first Form I was previously reported under (1)

..	..
----	----

- (c) Number included in (3) (a) transferred from other areas

1	1
---	---

- (4) Number of those in (3) (a) who were :—

(a) found	1	1
-------------------	---	---

(b) examined after persuasion, or already under treatment ..	1	1
--	---	---

(c) served with Form 2
--------------------------------	----	----

(d) examined after service of Form 2
--	----	----

(e) prosecuted for failure :—

(i) to attend for, and submit to medical examination
---	----	----

(ii) to submit to and continue treatment
--	----	----

(f) transferred to other areas
----------------------------------	----	----

ALMONER'S REPORT, 1947.

The year 1947, has been a busy and interesting one. More than 600 visits have been made and over 700 letters sent. A number of those patients who were visited, would have failed to continue their treatment had it not been for the personal persuasion of the almoner. Importance of treatment is especially stressed to expectant mothers, and such cases are vigilantly followed up to see that they continue their treatment throughout pregnancy. Patients are asked to bring their babies, and if treatment for the new born baby is found to be necessary, the mother is encouraged to bring her child for regular treatment.

During the year, 53 children were examined and of these, 11 are now under treatment, the rest were found to be free from disease.

Information concerning 32 contacts comprising 30 females and 2 males, was obtained at the centre, notifications made and action taken, thus bringing under treatment a large number who would otherwise have drifted.

Notifications under Regulation 33B.

	Males	Females
Notifications received	11
Number of contacts traced	10
Number of contacts examined	8

The ages of the above range from 21 to 45 years.

Annual Return of Seamen Treated at the Special Treatment Centre, General Hospital, Middlesbrough, during the year 1947.

Nationality.	No. of Cases Treated.
British (British Isles only.) ..	179
British Empire.	
Aden	8
Australia	1
Canada	9
Cyprus	1
Eire	5
India	19
Malta G. C.	2
Newfoundland	1
Seychelles	1
South Africa	1
West Africa	1
West Indies	6
Foreign.	
America	5
Argentine	1
China	5
Denmark	10
Estonia	5
Equador	1
Finland	25
France	2
Greece	9
Holland	11
Latvia	2
Norway	36
Poland	2
Spain	4
Sweden	72
Zanzibar	1
Total No. of Seamen who attended	425
British	179
British Empire	55
Foreign	191

SPECIAL TREATMENT CENTRE.

Number of Cases under Observation and Treatment on December 31st, 1947.

Syphilis		Soft Chancre		Gonorrhoea		Other Cases		Total		Total Cases
M	F.	M.	F.	M.	F.	M.	F.	M.	F.	
203	220	9	1	67	33	60	23	339	277	616

Number of Cases and the Diseases they were suffering from, dealt with
for the first time during the years 1937 to 1947.

Year	Syphilis		Soft Chancre		Gono-rrhoea		Other Cases		Total		Grand Total
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
1937	113	37	8	..	254	23	148	18	523	78	601
1938	92	41	16	..	230	34	159	33	497	108	605
1939	63	12	10	..	156	33	118	28	347	73	420
1940	42	14	3	..	135	18	92	29	272	61	333
1941	67	21	18	..	237	30	88	29	410	70	480
1942	167	17	20	..	172	12	125	48	484	77	561
1943	155	63	12	..	208	10	213	127	588	200	788
1944	140	67	10	..	207	40	247	113	604	220	824
1945	145	79	15	..	327	62	287	166	774	307	1,081
1946	225	82	21	..	386	70	509	151	1141	303	1,444
1947	196	61	21	1	284	50	489	102	990	214	1,204

Middlesbrough Cases 456
Seamen 425
Other Cases 323

1,204

Congenital Syphilis.

Cases Classified in Age Groups.

Sex	Under One Year	1 to 5	5 to 15	Over 15 Years	Total
MALE	1	1	5	..	7
FEMALE	1	1	..	2	4
Total	2	2	5	2	11

Total attendances in 1947 of all persons suffering from :—

Syphilis		Soft Chancre		Gonorrhoea		Other Cases		Total		Grand Total
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
2,948	2,274	47	1	1,057	359	1,742	516	5,794	3,150	8,944

Middlesbrough	..	..	..	5,226
North Riding of Yorkshire			..	2,088
County of Durham	..	..	..	501
Other Areas	..	..	..	1,129
Total	..	..	..	8,944

Sessions and Attendances during 1947.

MONTH	MALES			FEMALES		
	No. Sessions	Attend- ances	Average	No. Sessions	Attend- ances	Average
January ..	26	457	17.6	13	259	19.9
February ..	24	282	11.75	12	192	16
March ..	26	380	14.62	13	245	18.84
April ..	22	369	16.77	11	214	19.5
May ..	24	377	15.71	13	244	18.8
June ..	26	278	10.69	12	193	16.08
July ..	26	413	15.9	14	198	14.14
August ..	24	383	15.95	12	179	14.91
September ..	20	429	21.405	13	195	15
October ..	23	405	17.61	11	180	16.36
November ..	20	360	18	13	202	15.5
December ..	18	316	17.5	10	155	15.5
Total ..	279	4,449	15.94	147	2,456	16.71

STATISTICAL
TABLES.

ABSTRACT OF HEALTH REPORTS FROM 1898 TO 1947.

Year	Popula- tion	Death Rate			Birth Rate			Infant Death Rate			Smallpox			Measles	Scarlet Fever			Diphtheria			Diarrhoea & Enteritis			Whooping Cough			Chicken pox			Cancer	Bronchitis	Pneumonia			All Forms Tuberculosis			Influenza		Heart Disease		Appendicitis		Nephritis		Puerperal Fever		Other Puerperal Causes		Premature Birth, &c.		Violent Deaths		Syphilis			
		No. of Deaths	per 1000 pop.	England and Wales	No. of Births	per 1000 pop.	England and Wales	No. of D's	per 1000 b'ths	England & Wales	Notified	Deaths	Rate per 1000 pop.		Notified	Deaths	Rate per 1000 pop.	Notified	Deaths	Rate per 1000 pop.	Deaths	Rate per 1000 pop.	Deaths	Rate per 1000 pop.	Deaths	Rate per 1000 pop.	Deaths	Rate per 1000 pop.	Deaths			Rate per 1000 pop.	Deaths	Rate per 1000 pop.	Deaths	Rate per 1000 pop.	Deaths	Rate per 1000 pop.	Deaths	Rate per 1000 pop.	Deaths	Rate per 1000 pop.	Deaths	Rate per 100 pop.	Deaths	Rate per 100 pop.											
1898	89,246	1,967	22.04	17.5	2,904	32.52	29.3	566	190	160	1,397	198	2.22	235	63	0.71	237	8	0.09	54	14	0.16	57	0.64	9	0.10	..	0	..	43	0.48	96	1.08	..	225	2.52	..	108	2.21	1	0.01	112	1.25	14	0.16	2	0.02	4	0.04	219	2.45	56	0.63
1899	93,615	2,058	22.17	18.2	3,130	33.47	29.1	575	183	163	1	0	..	135	68	0.72	345	13	0.14	30	9	0.10	62	0.66	41	0.44	..	0	..	51	0.54	134	1.43	..	397	4.23	..	215	2.26	19	0.20	136	1.45	29	0.31	2	0.02	8	0.09	195	2.08	59	0.63	6	0.06
1900	97,007	2,407	25.07	18.2	3,343	34.46	28.7	663	198	154	0	0	..	85	24	0.24	284	13	0.13	25	3	0.03	62	0.64	39	0.40	..	0	..	71	0.69	158	1.63	..	546	5.63	..	247	2.59	28	0.23	147	1.52	24	0.25	3	0.03	11	0.11	231	2.38	72	0.74	7	0.07
1901	91,371	1,995	21.90	16.9	3,328	36.44	23.5	637	197	151	0	0	..	105	44	0.47	376	27	0.29	68	19	0.28	188	2.06	32	0.35	..	0	..	50	0.58	117	1.18	..	281	3.08	..	225	2.44	9	0.10	134	1.47	28	0.31	2	0.02	12	0.13	219	2.39	82	0.89	9	0.10
1902	93,354	1,912	20.43	16.3	3,370	36.09	28.5	616	182	134	4	0	..	126	10	0.11	500	41	0.44	164	58	0.62	109	1.17	31	0.33	..	1	0.01	42	0.45	87	0.93	..	304	3.26	..	204	2.18	8	0.09	125	1.34	24	0.26	1	0.01	10	0.11	242	2.59	78	0.84	10	0.11
1903	95,013	2,072	21.77	15.5	3,489	36.72	28.4	650	188	132	13	1	0.01	81	67	0.71	252	3	0.03	117	32	0.34	160	1.68	15	0.16	..	1	0.01	53	0.57	109	1.15	..	346	3.63	..	209	2.31	15	0.16	137	1.44	29	0.31	5	0.05	22	0.23	222	2.34	63	0.66	8	0.08
1904	96,684	1,934	20.00	16.3	3,589	37.12	27.9	612	170	145	14	0	..	67	39	0.40	612	10	0.10	79	11	0.11	195	2.02	25	0.26	..	0	..	71	0.71	107	1.11	..	265	2.74	..	218	2.25	4	0.04	131	1.36	20	0.20	4	0.04	13	0.14	194	2.01	53	0.55	17	0.18
1905	98,369	2,083	21.18	15.3	3,435	34.91	27.2	598	171	127	0	0	..	78	71	0.72	344	7	0.07	107	34	0.34	147	1.49	43	0.44	..	2	0.02	74	0.69	117	1.19	..	370	3.76	..	222	2.25	5	0.05	143	1.45	15	0.15	1	0.01	16	0.16	189	1.90	64	0.66	12	0.12
1906	100,069	2,072	20.72	15.5	3,594	35.91	27.1	611	170	133	0	0	..	73	23	0.23	514	12	0.12	97	31	0.31	227	2.26	40	0.39	..	0	..	71	0.69	110	1.09	..	315	3.15	..	170	1.69	6	0.06	157	1.57	29	0.29	3	0.03	16	0.16	235	2.35	59	0.59	21	0.21
1907	101,783	2,077	20.48	15.1	3,483	34.22	26.3	543	155	117	0	0	..	75	96	0.94	108	8	0.07	126	32	0.31	93	0.91	49	0.48	..	0	..	81	0.83	119	1.17	..	437	4.29	..	212	2.08	24	0.24	156	1.53	29	0.29	2	0.02	13	0.13	200	1.97	65	0.64	6	0.06
1908	103,511	2,066	19.95	14.8	3,733	36.06	26.5	591	158	122	0	0	..	76	99	0.95	154	5	0.05	179	30	0.29	226	2.18	7	0.07	..	0	..	66	0.65	108	1.04	..	355	3.43	..	156	1.89	14	0.14	136	1.31	19	0.18	8	0.08	202	1.96	61	0.59	13	0.13
1909	105,255	2,043	19.41	14.6	3,363	31.90	25.6	537	161	109	0	0	..	71	61	0.58	105	2	0.02	97	22	0.22	109	1.04	69	0.66	..	0	..	88	0.83	132	1.25	..	399	3.72	..	203	1.92	18	0.17	143	1.36	36	0.34	10	0.10	232	2.20	50	0.48	10	0.10
1910	107,014	1,822	17.02	13.5	3,440	32.14	25.1	496	144	100	0	0	..	82	11	0.10	185	3	0.03	143	35	0.33	153	1.43	32	0.29	..	0	..	80	0.71	122	1.14	..	354	3.31	..	153	1.42	6	0.06	109	1.02	27	0.25	4	0.04	9	0.08	187	1.75	60	0.56	6	0.06
1911	105,124	2,101	19.98	14.6	3,255	30.96	24.4	549	165	130	0	0	..	34	75	0.71	358	7	0.07	167	26	0.25	160	1.52	79	0.75	..	0	..	75	0.72	134	1.27	..	418	3.98	..	184	1.75	7	0.07	134	1.27	24	0.23	1	0.01	6	0.06	178	1.69	49	0.46	4	0.04
1912	106,554	1,897	17.80	13.4	3,402	31.88	24.0	431	126	94	0	0	..	21	181	1.69	541	21	0.19	104	21	0.20	50	0.47	7	0.07	..	0	..	70	0.67	138	1.30	..	302	2.83	304	172	1.61	8	0.08	132	1.24	6	0.06	30	0.28	11	0.10	196	1.84	65	0.61	9	0.08
1913	107,993	1,954	18.09	13.8	3,361	31.12	24.1	431	128	108	0	0	..	1	51	0.47	819	21	0.19	148	22	0.20	119	1.10	23	0.21	..	0	..	98	0.87	141	1.31	..	305	2.82	469	175	1.62	11	0.10	133	1.23	6	0.06	56	0.52	3	0.03	15	0.14	182	1.69	70	0.65	6	0.06
1914	126,452	2,443	19.32	14.0	4,102	32.51	23.8	628	153	104	0	0	..	25	64	0.51	762	36	0.28	317	55	0.44	193	1.54	60	0.47	..	0	..	88	0.72	182	1.44	..	389	3.08	527	223	1.76	13	0.10	152	1.20	7	0.06	43	0.34	2	0.02	9	0.08	240	1.89	72	0.57	11	0.09
1915	116,901	2,585	22.11	15.7	3,609	30.87	21.8	543	151	109	0	0	..	16	198	1.69	334	11	0.09	261	47	0.40	144	1.23	49	0.42	..	0	..	100	0.85	173	1.48	..	488	4.17	770	230	1.96	20	0.17	146	1.25	2	0.02	48	0.41	2	0.02	12	0.10	195	1.67	66	0.56
1916	115,548D 125,718B	2,089	18.07	14.3	3,535	28.12	21.9	430	121	91	0	0	..	16	166	1.46	415	16	0.14	366	52	0.45	114	0.99	27	0.23	..	0	..	79	0.68	151	1.31	..	365	3.16	614	204	1.76	13	0.11	125	1.08	2	0.02	45	0.39	2	0.02	12	0.10	177	1.52	87	0.75
1917	119,251D 132,931B	2,308	19.35	14.2	2,956	23.02	18.1	465	151	96	0	0	..	24	159	1.33	169	3	0.03	219	28	0.24	124	1.04	39	0.33	..	0	..	103	0.86	162	1.36	..	390	3.27	604	228	1.07	11	0.09	109	0.91	3	0.03	41	0.34	2	0.02	16	0.14	163	1.37	61	0.51
1918	115,952D 129,696B	2,641	22.81	17.3	3,327	25.64	17.6	485	145	97	0	0	..	16	12	0.10	158	4	0.04	164	25	0.22	112	0.98	57	0.49	..	0	..	97	0.83	162	1.39	..	634	5.47	434	217	1.87	353	3.04	100	0.87	24	0.21	1	0.01	10	0.08	158	1.36	67	0.58
1919	127,142D 132,444B	2,339	18.39	14.0	3,531	26.66	18.5	493	139	89	2	0	..	1	203	1.59	411	10	0.08	210	35	0.28	108	0.85	9	0.07	..	0	..	111	0.87	182	1.43	380	414	3.26	443	167	1.31	149	1.17	122	0.96	8	0.06	25	0.20	4	0.03	4	0.03	165	1.29	67	0.53
1920	132,208	2,026	15.32	12.4	4,431	33.51	25.4	602	135	79	14	1	0.01	4	43	0.33	371	6	0.05	176	12	0.09	125	0.95	24	0.18	..	0	..	105	0.79	159	1.20	245	339	2.50	451	178	1.34	16	0.12	114	0.56	5	0.04	29	0.22	7	0.05	7	0.05	179	1.35	59	0.45	13	0.10
1921	133,400	1,893	14.41	12.1	4,218	31.62	22.4	501	118	82	42	0	..	3	48	0.36	135	0	0.00	134	10	0.07	121	0.90	13	0.09	46	0	..	114	0.84	165	1.24	192	295	2.21	414	162	1.21	25	0.19	123	0.90	4	0.03	34	0.26	4	0.03	8	0.06	128	0.96	72	0.54	9	0.07
1922	134,800	1,960	14.50	12.8	3,774	27.99	20.6	421	111	77	253	0	..	4	9	0.07	305	4	0.03	82	12	0.09	53	0.39	35	0.26	62	0	..	126	1.09	178	1.32	257	383	2.84	386																				

TABLE II.—Notifications of Infectious Diseases in 1947, arranged according to Age Groups and Wards.

NOTIFIABLE DISEASE	NUMBER OF CASES NOTIFIED														NUMBER IN EACH WARD													
	At all Ages		AT AGES												Ayresome	Acklam	Cannon	Cleveland	Exchange	Grove Hill	Linthorpe	Newport	Ormesby	St. Hilda's	Vulcan	Total		
			0—	1—	3—	5—		10—	15—	25—		45—																
						M.	F.			M.	F.		M.	F.													M.	F.	M.	F.
Diphtheria	17	24	..	4	2	4	6	4	10	3	..	1	3	1	3	..	3	..	3	3	3	6	4	11	1	4	41	
Scarlatina	241	281	1	16	25	40	50	106	105	56	72	18	21	4	7	..	49	34	21	39	26	84	106	24	94	8	37	522
Measles (excluding Rubella)	1396	1359	101	439	393	502	451	339	396	10	10	2	8	3	4	..	288	113	239	237	142	374	341	261	438	133	216	2755
Whooping Cough	149	177	25	31	42	51	69	42	44	..	..	..	..	..	..	..	44	26	31	16	11	29	78	36	34	3	18	326
Chicken-pox	312	367	19	72	38	76	64	119	228	17	17	4	6	5	2	..	53	66	61	66	43	109	94	35	62	40	50	679
Dysentery	..	4	..	1	2	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	3	4
Puerperal Pyrexia	..	61	..	..	..	..	..	..	..	..	..	..	26	..	35	..	1	1	3	..	1	5	46	..	1	1	2	61
Ophthalmia Neonatorum	5	2	5	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	7
Cerebro-spinal Fever	16	7	5	2	1	4	2	3	1	..	..	1	1	1	..	..	1	..	..	5	..	2	4	3	8	..	1	23
Erysipelas	15	18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	1	2	1	..	4	13	1	..	2	2	33
Acute Primary Pneumonia	86	77	8	6	5	6	7	6	7	5	4	9	6	19	16	27	13	6	17	9	9	28	28	11	12	15	15	163
Influenzal Pneumonia	2	1	..	..	1	..	..	..	..	..	..	..	..	1	..	1	1	1	1	..	..	1	..	..	..	..	..	3
Pulmonary Tuberculosis	141	114	..	..	1	4	2	3	7	12	11	35	37	42	43	45	19	12	26	11	14	39	42	23	36	15	18	255
Other Tuberculosis	15	15	..	..	4	3	1	3	5	5	1	2	..	2	4	..	3	1	2	..	2	1	8	1	6	1	5	30
Polio-Encephalitis	1	3	..	..	..	..	..	..	1	..	1	..	1	..	..	..	2	1	1	..	..	1	..	..	..	..	..	4
Polio-Myelitis	8	6	1	1	..	1	..	1	2	3	1	1	1	..	..	..	1	2	1	1	..	1	7	..	1	..	..	14
Total	2404	2516	165	142	571	514	691	652	626	806	111	117	73	111	81	118	486	263	408	388	253	654	775	399	703	219	372	4920

TABLE III.

Registrar General's Statistics, 1947.

AREA : MIDDLESBROUGH COUNTY BOROUGH.

(1) Estimated Mid-Year Resident Population—140,400.

(2)		Live Births allocated to Borough	Still Births allocated to Borough
Total			
Legitimate and	Males ..	1,888	61
Illegitimate	Females ..	1,743	50
Illegitimate	Males ..	132	3
	Females ..	95	6

(3) Notifiable Infectious Diseases.

Number of cases notified during the 52 weeks ended 31st December, 1947.

Cerebro- Spinal Fever.	Scarlet Fever	Whooping Cough.	Diphtheria.	Erysipelas.	Measles.	Smallpox.	Pneumonia.	Puerperal Pyrexia.	Typhoid.	Para- Typhoid.	Total
23	522	326	41	33	2,755	..	163	61	..	..	3,924

(4) Areal Comparability Factor. Issue suspended.

TABLE IV.

Deaths registered during 1947

CAUSE OF DEATH					AGES AT DEATH										
					At all ages	under one year	1 and under 2 yrs.	2 and under 3 yrs.	3 and under 4 yrs.	4 and under 5 yrs.	5 and under 10 yrs.	10 and under 15 yrs.	15 and under 20 yrs.	20 and under 25 yrs.	25 and under 35 yrs.
All Causes	Certified	..	..	..	1921	255	12	9	5	4	16	14	21	28	63
	Uncertified	..	..	..	3	..	..	..	..	..	..	..	..	..	..
	M.	F.													
Enteric Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	5	3	8	2	2	3	1	..	..	..	..	..
Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..
Diphtheria	..	..	..	1	2	3	..	..	1	1	1	..	..	..	..
Influenza	..	..	..	14	4	18	..	..	..	..	..	..	..	..	2
Encephalitis Lethargica	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..
Meningococcal Meningitis	..	..	..	3	1	4	..	1	1	1	..	1	..	..	..
Tuberculosis of Respiratory System	..	..	..	84	44	128	..	..	..	1	1	..	7	14	22
Other Tuberculous Diseases	..	..	..	..	7	7	..	3	2	..	2	..	..	..	..
Cancer, Malignant Disease	..	..	..	165	136	301	..	..	..	..	..	..	2	..	3
Rheumatic Fever	..	..	..	2	1	3	..	..	..	..	1	..	1	..	1
Diabetes	..	..	..	9	10	19	..	..	..	..	..	1	..	..	3
Cerebral Haemorrhage, etc.	..	..	..	83	86	169	3	1	..	1	..	..	..	..	1
Heart Disease	..	..	..	271	240	511	5	2	..	..	1	1	1	..	4
Arterio-Sclerosis	..	..	..	51	43	94	..	..	..	..	..	..	..	..	..
Bronchitis	..	..	..	39	10	49	2	..	..	..	..	..	1	..	1
Pneumonia	..	..	..	28	16	44	7	..	1	1	..	..	..	..	2
„ Broncho	..	..	..	49	21	70	43	1	..	1	..	1	1	..	..
Other Respiratory Diseases	..	..	..	9	4	13	1	..	..	..	..	..	..	..	1
Ulcer of Stomach or Duodenum	..	..	..	12	6	18	..	..	..	..	..	..	1	..	1
Diarrhoea, etc.	..	..	..	31	26	57	54	2	..	..	..	..	..	..	..
Appendicitis and Typhlitis	..	..	..	2	3	5	..	..	..	..	1	1	1	..	..
Cirrhosis of Liver	..	..	..	3	..	3	..	..	..	..	..	..	..	..	..
Acute and Chronic Nephritis	..	..	..	24	29	44	..	..	..	..	..	..	1	4	3
Puerperal Sepsis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Accidents and Diseases of Pregnancy & Parturition	..	..	..	..	2	2	..	..	..	..	..	..	..	..	1
Congenital Debility and Malformation, Premature Birth	..	..	..	37	40	77	77	..	..	..	..	..	..	..	..
Suicide	..	..	..	6	6	12	..	..	..	..	..	..	2	..	1
Other Deaths from Violence	..	..	..	40	9	49	4	..	1	..	1	4	4	3	6
Other defined diseases	..	..	..	107	89	196	54	..	..	..	..	4	6	..	2
Causes ill-defined or unknown	..	..	..	2	2	4	..	..	..	..	..	..	..	..	..
Syphilis	..	..	..	10	1	11	1	..	..	..	..	..	..	1	1
Dysentery	..	..	..	1	..	1	1	..	..	..	..	..	..	..	..
Polio-encephalitis	..	..	..	..	2	2	..	..	..	..	1	..	..	1	..
Total	..	..	..	1089	835	1924	255	12	9	5	4	16	14	21	63

ified according to Ages and Wards.

			Deaths in Public Institutions	Number of Deaths and Death Rate in each Ward in the Borough												
45 and under 55 yrs.	55 and under 65 yrs.	65 yrs. and over		Ayresome	Acklam	Cannon	Cleveland	Exchange	Grove Hill	Linthorpe	Newport	Ormesby	St. Hilda's	Vulcan	Non-Residents	Totals
192	303	904														
..	1	2														
..
..
..	..	..	3	..	..	2	..	..	1	..	3	1	..	..	1	8
..
..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	1
..	..	..	3	..	..	..	..	..	..	..	1	..	..	1	1	3
1	3	10	2	..	1	1	1	..	4	7	2	1	..	1	..	18
..	1	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1
..	..	..	4	..	1	..	..	..	1	..	..	1	..	1	..	4
24	25	6	72	6	7	7	9	8	14	16	15	19	8	11	8	128
..	..	..	6	1	..	1	..	1	1	..	..	2	..	1	..	7
47	72	163	130	32	18	18	14	13	41	60	22	33	7	14	29	301
..	..	..	2	..	..	..	..	..	2	..	..	1	..	..	..	3
2	4	7	13	1	2	2	..	..	1	6	..	1	1	..	5	19
17	28	115	60	20	11	9	13	10	27	27	8	19	7	10	8	169
48	93	342	108	52	41	34	26	25	67	97	27	54	32	36	20	511
2	13	79	39	9	3	9	3	3	11	25	9	6	5	2	9	94
9	9	27	10	5	3	2	5	2	9	5	7	7	3	..	1	49
5	8	18	15	5	3	2	1	4	4	6	1	7	3	6	2	44
5	2	15	32	2	6	5	5	5	4	10	6	7	3	5	12	70
5	1	5	5	1	2	..	1	1	2	5	..	1	..	..	..	13
4	3	8	12	3	..	..	..	1	4	5	..	1	..	1	3	18
..	..	..	48	10	1	8	5	3	1	2	8	3	4	7	5	57
1	..	..	5	1	..	1	..	..	..	1	..	1	..	..	1	5
..	1	1	3	..	..	1	..	..	..	..	..	..	..	..	2	3
5	3	24	26	2	3	1	2	2	4	12	2	3	1	4	8	44
..
..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	2
..	..	..	50	7	4	7	10	2	5	2	6	12	5	6	11	77
3	1	4	4	2	..	..	..	2	5	..	..	2	..	..	1	12
1	8	6	33	1	3	1	..	3	7	3	3	5	2	3	18	49
11	26	69	136	15	8	10	7	7	25	38	11	20	6	12	37	196
1	1	2	2	..	..	..	1	..	1	..	..	..	..	1	1	4
1	2	5	4	1	..	..	1	3	..	1	..	1	1	1	2	11
..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	1
..	..	..	2	..	..	..	..	..	1	..	..	..	..	..	1	2
192	304	906	833	176	117	121	104	95	242	328	131	209	89	125	187	1924

TABLE V.—INFANTILE MORTALITY—1947.

REGISTERED DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER 1 YEAR.

[illegible]

TABLE VI.—Summary of Births notified to the Medical Officer of Health during the year 1947.

WARDS	Jan.		Feb.		March		April		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.		Total including Still-births			Stillbirths		Total No. of Births notified excluding Still-births	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	TOT.	M.	F.	TOT.	M.	F.			
Ayresome	18	24	22	20	14	14	8	17	21	31	26	20	12	18	11	16	17	9	16	17	18	11	9	10	192	207	399	9	7	383	
Acklam	1	8	14	10	10	8	10	10	9	8	4	11	9	8	4	7	9	9	4	10	5	1	8	6	87	96	183	1	2	180	
Cannon	15	11	8	22	15	10	13	14	16	15	8	15	14	11	10	9	8	13	9	26	8	4	13	10	137	160	297	2	4	291	
Cleveland	11	11	11	9	18	17	3	13	20	8	10	8	13	11	9	12	9	9	10	14	11	7	8	6	133	125	258	3	3	252	
Exchange	9	11	8	8	7	9	6	4	7	8	10	9	8	3	10	9	14	8	4	4	7	9	7	6	97	88	185	—	2	183	
Grove Hill	14	26	13	21	19	25	24	17	29	17	18	21	21	14	17	6	27	20	20	23	18	17	14	17	234	224	458	4	5	449	
Linthorpe	32	20	23	20	29	24	28	15	38	23	24	22	27	22	15	15	22	15	18	16	23	18	19	18	298	228	526	7	9	510	
Newport	10	6	13	11	20	19	17	16	15	13	17	14	18	14	15	13	14	19	6	7	15	14	9	11	169	157	326	5	11	310	
Ormesby	26	16	23	19	26	26	19	16	21	24	23	21	24	18	27	16	23	16	25	25	25	19	22	23	275	239	514	9	6	499	
St. Hilda's	9	5	5	5	8	11	5	5	6	—	8	8	12	6	7	10	7	4	12	5	7	5	13	5	99	69	168	4	5	159	
Vulcan	15	13	4	9	11	20	17	6	10	11	8	7	18	12	8	5	11	6	11	14	7	9	11	4	131	116	247	6	5	236	
Non-Residents	14	4	9	6	5	5	6	5	10	8	12	14	10	11	10	5	5	7	8	4	9	10	4	3	102	82	184	20	10	154	
TOTALS	174	155	153	160	182	188	156	138	202	166	168	170	186	148	143	123	166	135	134	165	153	124	137	119	1954	1791	3745	70	69	3606	
Births notified by :																															
Doctors	20		24		24		12		17		16		14		6		8		13		14		15			183					
Reg. Midwives	309		289		346		282		351		322		320		260		293		286		263		241			3562					
Other Women, etc.	—		—		—		—		—		—		—		—		—		—		—		—			—					
TOTALS	329		313		370		294		368		338		334		266		301		299		277		256			3745					

TABLE VII.

Public Health (Tuberculosis) Regulations, 1930.

PART 1.—Summary of Notifications during the period from the 1st January, 1947, to the 31st December, 1947, in the area of the County Borough.

Age Periods	Formal Notifications												Total Notifi- cation
	Number of Primary Notifications of new cases of Tuberculosis												
	0-	1-	5-	10-	15-	20-	25-	35-	45-	55-	65-	Total (all ages)	
Respiratory—													
Males	3	2	12	16	14	15	14	11	19	1	107	14
Females	3	6	11	16	18	27	11	6	3	1	102	11
Non-Respiratory—													
Males	2	3	3	1	1	1	..	..	..	..	11	1
Females	2	4	1	..	..	2	2	..	..	..	11	1

SUPPLEMENTAL RETURN.

PART II.—New Cases of Tuberculosis coming to the knowledge of the Medical Officer of Health during the above-mentioned period, otherwise than by formal notification.

Age Periods	0-	1-	5-	10-	15-	20-	25-	35-	45-	55-	65-	Total
Respiratory—												
Males	1	1	..	1	4	5	8	3	10	1	34
Females	1	..	1	2	5	..	..	1	2	12
Non-Respiratory—												
Males	1	..	2	..	..	1	..	..	..	..	4
Females	3	1	..	..	..	..	..	..	..	..	4
TOTAL												54

Source of Information		No. of Cases	
		Respiratory	Non-Respiratory
Death Returns {	From local Registrars	28	3
	Transferable deaths from Registrar General .. ..	..	..
Posthumous notifications		2	1
“Transfers” from other areas (other than transferable deaths)		16	4
Other sources if any (specify) H. M. Forces .. ..		..	..
TOTAL..		46	8

TABLE VIII.

Cancer.

DEATH RATES PER 1,000

Year	Middlesbrough				England and Wales
1939	1.33	1.66
1940	1.56	1.72
1941	1.74	1.78
1942	1.75	1.83
1943	1.86	1.98
1944	1.49	1.89
1945	1.68	1.94
1946	1.86	1.84
1947	1.92	1.85

TABLE IX.

Deaths from Cancer.

AGE DISTRIBUTION.

At ages	Male		Female	Total
1 to 5 years
5 to 45 years	..	7	8	15
45 to 65 years	..	65	46	111
65 and over	..	72	72	144
		<hr/>	<hr/>	<hr/>
Total	144	126	270

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